INDEX

Sixty-second Quarto Volume-January 1, 1917, to June 30, 1917.

AUTHORS

Acworth, W. M., 1033 Affleck, B. F., 1225 Aishton, R. H., 1046 Alfrey, H. H. 1155 Allen, C. Frank, 442 Angier, F. J., 1489 Armstrong, A. H., 1143

Barker, R. S., 1471
Batchelder, A. F., 13
Beeuwkes, R., 642
Begien, R. N., 437
Bell, J. Snowden, 256
Belnap, Hiram W., 101
Benjamin, C. H., 1150
Biddle, W. B., 1047
Boardman, Francis, 616
Bousfield, J. H. A., 395
Bradley, E. E., 640
Bremner, William H., 1050
Brown, H. B., 1056
Buell, D. C., 234, 848, 945
Bunger, W. O., 1483
Burns, T. J., 1039
Bury, George, 997

Chamberlin, E. J., 1112 Cheatham, B. F., 1412 Clark, T. C., 773 Clausen, L. R., 730 Claveille, Albert, 1138 Clough, A. M., 1141 Coss, J. L., 174, 442, 988 County, A. J., 355 Crawford, D. F., 1406 Curtis, D. C., 946

Daniels, Winthrop M., 19 Dean, W. E., 1005 De Groot, E. H. Jr., 174 Delano, Frederic A., 87 Dewson, E. H., 615 Dickinson, J. M., 1045 Dietrick, J. A., 1180 Dixon, George D., 26 Dodgson, Frank L., 1424 Donnelly, Charles, 1237 Dorney, Joseph, 960 Duffy, John, 624 Dunn, H. H., 407 Dunn, Samuel O., 601

Ecker, Frederick H., 1108 Elliott, Howard, 992, 1145

Forman, Harry W., 86, 1193 Fowler, George L., 173, 359, 615

Glenn, John M., 1202 Gordon, Wilbur, 128 Goss, O. P. M., 7,93 Griggs, H. W., 1471 Grime, E. M., 1139 Groghegan, J. T., 733 Hale, Arthur, 1053
Hand, George F., 896
Harahan, W. J., 996
Harrison, Fairfax, 996, 1092, 1267, 1474
Hatt, W. K., 440
Hawkins, W. P., 1054
Hine, Charles, 1306
Hobbs, George S., 995
Hobbs, W. S., 1180
Hopkins, J. H., 21
Hulme, Thomas W., 323
Humphrey, A. L., 1341
Hustis, J. H., 994

Isaacs, John D., 1086

James, Charles C., 99, 733 Johnson, L. E., 995

Keefe, W. B., 1470 Knowles, C. R., 740 Kruttschnitt, Julius, 699, 1047

Lancaster, W. C., 999
Landon, W. G., 773
Lane, Francis W., 687
Leigh, E. B., 5
Lemmerich, Gustave E., 86
Lisman, F. J., 128, 301
Loree, L. F., 992
Loudon, Andrew C., 635
Lovett, R. S., 617
Lucore, F. M., 1134
Lyndon, George W., 278

McAuliffe, Eugene, 932
McCowan, A., 319
McKnight, T. H. B., 1477
McVeigh, E. J., 25
Mackie, J. F., 1425
Metcalf, F. M., 1326
Moderwell, C. M., 1101
Moore, John F., 1280
Moore, Lewis E., 300, 616, 732
Morse, G. A., 440
Morse, W. C., 344
Murphy, Anson, 317

Nelson, James P., 1133 Newell, C. E., 343 Nichols, Bessie W., 1141 Nicoles, K. M., 773

Orrock, J. W., 551 Ottarson, A. P., 49

Parks, Chas. E., 1141
Parmelee, Julius H., 901
Patenall, F. P., 988
Patterson, George Stuart, 1236
Payne, J. L., 181, 734, 887, 953

Peterson, Sir William, 604 Porterfield, J. F., 233 Post, George A., 87 Fotts, T. S., 21 Poultney, E. Cecil, 1471 Powell, T. C., 1086

Queenan, William, 1012 Quinn, C. H., 641

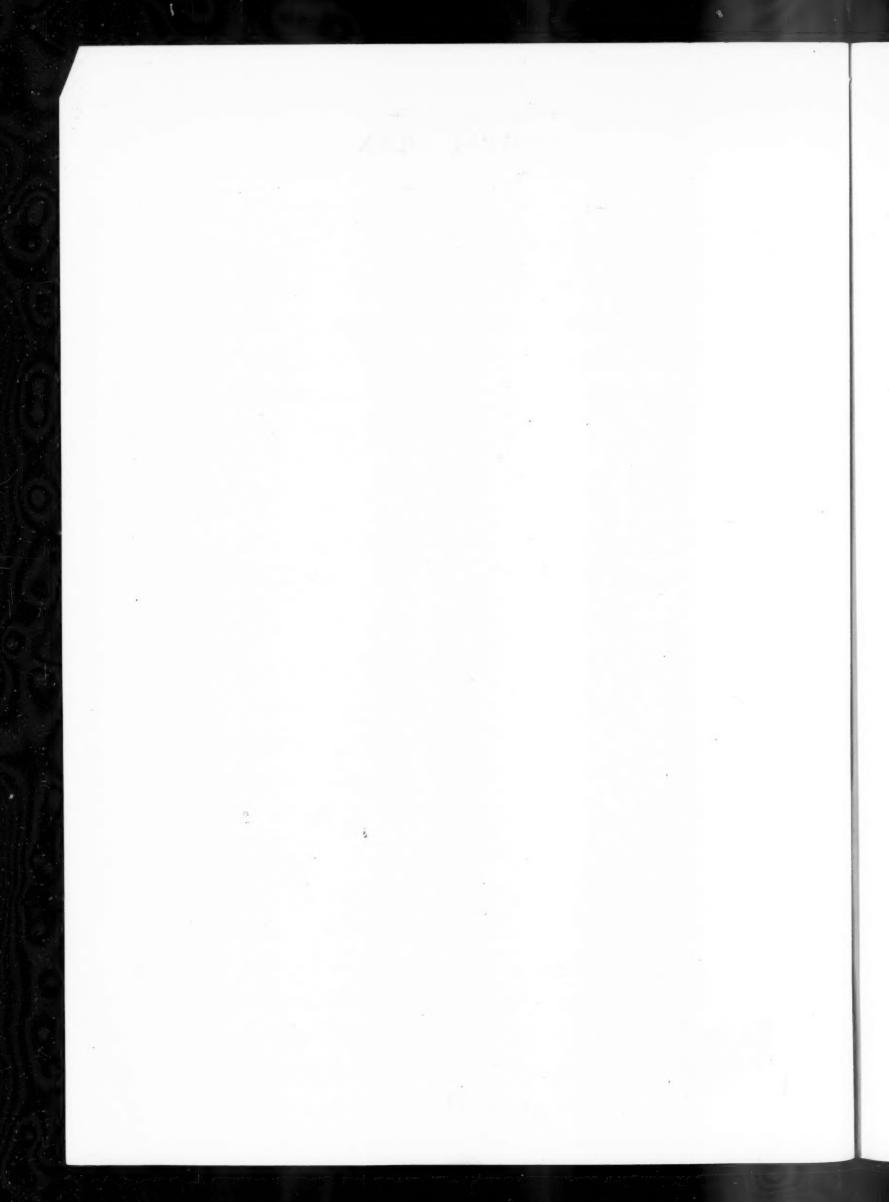
Rambo, Charles N., 940 Raymond, Wm. G., 302, 438 Rea, Samuel, 705, 990 Richardson, C. P., 735 Riggs, H. E., 441 Ryan, T. T., 48

Schellens, E. L., 47
Schmidt, E. C., 407
Scott, W. R., 302
Seley, C. A., 691
Sheafe, J. S., 302
Sillcox, Lewis K., 368
Simmer, M. A., 1401
Simonds, Frank H., 784
Slifer, Hiram J., 1105
Smart, A. G., 1404
Smith, A. H., 991
Steinmetz, W. R., 306
Stevens, Thos. S., 1180
Stokes, E. C., 1108
Stone, Warren S., 1094
Storey, W. B., 1406
Stuntz, H. L., 615
Sugimoto, Y., 17
Sullivan, J. G., 731, 932
Summerhays, W. A., 390

Thatcher, C. W., 1085
Thelen, Max, 349
Thom, Alfred P., 91
Thompson, A. W., 994
Thompson, Sanford E., 357
Thornton, Henry W., 1271
Thornton, William H., 599
Townsend, J. F., 616
Turner, Walter V., 709
Tye, William F., 309

Underwood, F. D., 993

Walker, Roberts, 17
Warfield, S. Davies, 1107, 1206
Warrick, F. R., 1088
Watts, W. E., 6
Weston, A. H., 48
White, E. R., 6
Whitenton, W. M., 1405
Willard, Daniel, 1011, 1307
Winfield, Edwin, 1403
Winslow, Carlisle P., 150
Wolcomb, Harvey De Witt, 50
Wollner, William S., 1422



GENERAL INDEX

[Illustrated articles are indicated thus *; Editorials thus †; Letters to Editor thus ‡].

A

Acar Manufacturing Company: Blue Signal Safety Device, 1494*
Accident (See also Safety First):
Buffer Cars for Passenger Trains, 615‡
Chicago, Burlington & Quincy near Cromwell, Iowa, 240
Cincinnati, Hamilton & Dayton at Lima, Ohio, 370
Derailments Due to Defective Equipment, 1012
Explosion at Black Tom Passet on 754

Explosion at Black Tom, Report on, 754 I. C. C. Bulletin No. 60, 272; No. 61, 1057, 1080†

Derailments Due to Defective Equipment, 1012
Explosion at Black Tom, Report on, 754
I. C. C. Bulletin No. 60, 272; No. 61, 1057, 1080†
Monthly Summaries: December, 108; January, 399; February, 948; March, 1144; April. 1247
Northern Pacific Preventive Work, 1012
Pennsylvania at Bristol, Pa., 371, 463
Pennsylvania at Mount Union, Pa., 371, 385†, 404*, 459, 615‡, 730‡, 988‡, 1030†, 1056
Record for 1916, 1080†
Reid-Newfoundland Railroad, near Glenwood, N. F., 287
Trespassing in War Time, 816†, 1130†
Western Maryland at Knobmount, 3†
Accounting (See also Association of Transportation and Car Accounting Officers; also Valuation):
Clearing House for Inter-Railway Accounts, 1468†, 1477
Depreciation—The Hen and the Erie Ferry Boat, 99, 301‡, 733‡
Fiscal Year Change and the State Commissions, 111
Labor Saving Machines, 1457
Revision of Billing at Large Terminals, 49
Acworth, W. M.: Government Ownership in Foreign Countries, 1033
Adamson Law (See Legislation)
Advertisement:
Car Loading, Heavier, 1221†
Farming and Regulation, 459
Labor Controversy, 14
War Loans, European, 816†, 835*
Advisory Commission (See National Defense)
Aerothrust Engine Company: Portable Gas Engine, 682*
A. G. A. Railway Light & Signal Company: Foreign Countries, 1061*
Agriculture (See also Railway Development Association):
Farmers and the Railroads, 47‡, 459
Food Problem Tackled, 884, 961, 984†, 1018, 1019, 1376*, 1467†
Long Island Food Train, 1067
Weed Killing Chemicals, 557*, 679*
Air Brake (See Brake)
Air Brake Sociation: Annual Convention, 209, 357
Alaska: I. C. C. Investigation of Rates, Practices, etc., 1255
Alaska Northern:
Construc

American Gear Manufacturers' Association Organized, 754

ganized, 754

American Iron & Steel Institute:
Rail Production in 1916, 936
Track Materials Produced in 1916, 1138

American Locomotive Company:
Madrid, Zaragoza & Alicante Locomotives,
785*
War Locomotives, 1444

785*
War Locomotives, 1456*
American McKenna Process Company: Rails,
Rerolling of, 1161*

American Railway Association:
Annual Dinner, 503
Car Mileage Statistics, 127†, 145*
Car Service Commission with Plenary Powers, 241
Car Service Rules New 199, 274, 440, 200

Car Service Commission with Figure 17 weers, 241

Car Service Rules, New, 188, 374, 449, 802, 910, 928†, 951, 9881*, 1134‡, 1352

Car Shortage Figures, 115, 125†, 326, 650, 683†, 717, 909, 926†, 1208, 1222†, 1467†, 1496

1496
Car Situation, 312, 353, 449
Car Supply Investigation of the I. C. C., 15, 126†, 135, 241
Car Surpluses and Shortages, 1907-1916, 240*

American Railway Association (Continued):

American Railway Association (Continued):

Demurrage Rates, New, 757, 796
Meeting Postponed, 871†
Special Committee on National Defense, 285, 308, 409, 434†, 769†, 777*, 817†, 824, 845*, 985†, 1267*, 1321*
Standard Code, 3†, 5‡
American Railway Engineering Association:
Address of President Baldwin, 515†, 518*
Annual Dinner, 599*
Committees, New—Railway Operation, and Economics of Maintenance of Way Labor, 873†
Election of Officers, 605*, 659†

Economics of Maintenance of Way Labor, 873†
Election of Officers, 605*, 659†
Proceedings, 515†, 516†, 518*, 566*, 661*
Registration, 515†, 554, 565, 606, 660, 678
Report on Ballast, 578*
Report on Conservation of Natural Resources, 549*
Report on Economics of Railway Location, 563†, 594*
Report on Grading of Lumber, 660†, 667*
Report on Grading of Lumber, 660†, 667*
Report on Masonry, 659†, 661*
Report on Records and Accounts, 596*
Report on Records and Accounts, 596*
Report on Roadway, 564†, 588*
Report on Rules and Organization, 659†
677*
Report on Signals and Interlocking, 522*

677*
Report on Signals and Interlocking, 522*
Report on Signs, Fences and Crossings, 516†, 525*
Report on Stresses in Railroad Track, 550*
Report on Track, 566*
Report on Uniform General Contract Forms, 576*
Report on Water Service, 520*

Report on Water Service, 529*
Report on Wooden Bridges and Trestles, 516†, 538*
Report on Wood Preservation, 671*
Report on Yards and Terminals, 583*, 792
Resistance of Passenger Train Equipment, 407*
Test All Trest

Test, All-Ingot, for Steel Rails, 896 American Railway Master Mechanics' Associa-

American Railway Master Mechanics' Association:
Exhibitors at June Convention, 413, 801
Mechanical Associations, Closer Co-operation for, 926†
Mechanical Engineers at June Convention, 767†, 872†
American Society of Mechanical Engineers: Design of Electric Locomotives, 13
American Steel Foundries: Annual Report, 473
American Telephone & Telegraph Company:
Wire Facilities Mobilized for War Purposes, 1419
American Water Works Association: Sale of City Water to Railroads, 740
American Wood Preservers' Association: Annual Meeting, 149, 170†
Annual Reports (See names of companies; also Interstate Commerce Commission)
Apprentice (See Education)
Arbitration (See Employee—Wages)
Arizona Eastern: Car, Automobile Inspection, 1476*
Army (See National Defense; also War)
Associated Business Papers: Second Class Mail Rates, Proposed Increase in, 1†, 31, 281, 987†
Association of American Railway Accounting

987†
Association of American Railway Accounting Officers:
Clearing House for Inter-Railway Accounts, 1468†, 1477
Fiscal Year Change and the State Commissions, 111
Association of Railway Telegraph Superintendents: Meeting at Chicago, 881
Association of Transportation and Car Accounting Officers: Meeting at Atlanta, 11
Associations Railway in War 1176†

Associations, Railway, in War, 1176†

Atchison, Topeka & Santa Fe:
Breaks-In-Two for 1916, 900
Car, Stock, 1151*
Car, Tie, 749*
Coal Plant, Pulverized, at Marceline, Mo., 237*

Construction of Line Between Oceanside and Temecula—Order of California R. R. Commission, 162
Timber Protection Methods, 7*
Athletics (See Employee)
Atlanta, Birmingham & Atlantic: Valuation Hearings Before the I. C. C., 171†, 193, 212†, 225, 645, 747

Atlantic Coast Line: Signals, Highway Crossing, 1040*
Automatic Stop (See Signaling)

Automobile:
Car, Inspection: Arizona Eastern, 1476*
Duty of Drivers at Crossings, 216\$, 245
Traffic Solicitors; B. R. & P., 287
Truck Scales; B. & O., 1239*
Unloading from Gondola Cars, 1156*

Bache Review: War Taxation Bill, 1061
Baldridge Rail Contour Recorder, 609*
Baldwin Locomotive Works:
Annual Report, 381
Engines for Use at the Front, 1383*
Pacific and Santa Fe Types; L. V., 897*
Triplex Type; Virginian Ry., 141*
Ballast (See Maintenance of Way)
Baltimore & Ohio:
Car, Medical, 1250
Damage Suit Won, 871†
Employees in War Time, 1306
Engineers as General Managers, 727†
Farm Labor Bureau, 802
Fire Prevention Department, 110
Food Problem, Posters on, 1380*
Instructions to Passenger Conductors, 212†, 224

Fire Prevention Department, 110
Food Problem, Posters on, 1380*
Instructions to Passenger Conductors, 212†, 224
Pier, Coal, at Curtis Bay, 1226*
Protecting Property, 1446*
Safety First Bureau's Report for 1916, 852
"Safety First" for Soldier Guards, 1019, 1446*
Scales, Auto Truck, 1239*
Timber Preservation Department, 1489
Western Union Telegraph Company, Contract with, 326
Women Employees, 963, 1066*, 1163, 1407*
Baltimore & Ohio Southwestern: "Flagwoman,"
Miss Marie Travers a, 1062*
Barney & Smith Car Company: Coaches; D. & H., 217*
Battery (See Signaling)
Bearings:
Journal Friction, Tests on, 560*
Self-Centering Roller Side, 196*
Side Bearing Location, 368*
Bell (See Signaling)
Betts, E. E.: Car, Combination Stock and Coal, 450*
Biddle. William B., 109*
Bill (See Legislation)
Billing (See Freight)
Blaw Steel Construction Company: Bucket, Excavating, 608*
Boiler (See Locomotive)
Bonus (See Employee)
Boston & Maine: Passenger Service, Reductions in, 1159
Brake (See also Air Brake Association):
Hose, Life of, 319, 1008
Rigging Foundation, 709*
Breaks-In-Two (See Train Handling)
Bremner, William H., 1050*

Breaks-In-Two (See Train Handling) Bremner, William H., 1050* Brick Arch (See Locomotive)

Brick Arch (See Locomotive)

Bridges and Buildings (See also Construction, New):

Bridge Renewals Under Abnormal Conditions, 1434*

Burlington Bridge at Kansas City, 1180*

Hell Gate Bridge, 453*, 727†

Insulating Rails on Trough Floor of Harlem River Bridge; N. Y. C., 616*

Interstate Commerce Commission's New Office Building, 1099

Mississippi River Bridge; C. St. P. M. & O., 51*

New York Central Bridge at Castleton, 192, 1205

Pennsylvania Bridge at Manavunk Pennsylvania Bridge at Manavunk

Pennsylvania Bridge at Manayunk, Pa., 883* 883*
Poughkeepsie Bridge, Reinforcing the, 455
Report of A. R. E. A. on, 516†, 538*, 593*
Union Pacific Bridge at Omaha, 95*
Warehouse, Te-minal, in Cleveland, 1482*
Britain (See England)

Brown, E. N., 839* Bucket (See Hoisting and Conveying). Buffalo, Rochester & Pittsburgh:
Annual Report, 388†*, 428
Automobiles for Traffic Solicitors, 287
Liberty Loan Committees, 1198
Scrap, Breaking, 844*

Bureau of Explosives: Report for 1916, 738,

Bureau of Foreign and Domestic Commerce: Investigation of Transportation Facilities Abroad, 411

Buneau of Railway Economics:

Monthly Reports of Freight Operation, 1394
Revenues and Expenses for Calendar Year
1916, 649

1916, 649
Revenues and Expenses for October, 154;
November, 326; December, 649; January,
768†, 800; February, 927†, 962; March,
1164; April, 1496
Statistics for Fiscal Year 1916, 253†, 262
Trainmen's Earnings in 1916, 454
Bureau of Railway News and Statistics:

Capital for New Construction in 1916, 308 Rate Increases Throughout the World, 1110 Bury, George: American Railways in the War, 981†, 997

Business (See Finance; also Public, The Railways' Relations with)

[Illustrated articles are indicated thus *; Editorials thus †; Letters to Editor thus ‡.]

C

Camps, Army, Location of, 1339* Canada:

ada:
Annual Railway Statement, 1497
Car Loading, Heavier, 1291
Consolidation of Railroads Proposed, 309, 734\$, 872\$†
Equipment Built for Europe, 1463*
Government Ownership Results, 172\$†, 181
Officers of the A. R. E. Association, 659\$†
Passenger Service, Reductions in, 1460
Peterson, Sir William, on "Sister Democracies," 604*
Rail Production in 1916, 1138, 1360

Passenger Service, Reductions in, 1460
Peterson, Sir William, on "Sister Democracies," 604*
Rail Production in 1916, 1138, 1360
Rails for France, 1112, 1498
Report on the Railways for 1916, 887
Reports of the Royal Commission, 953, 957, 985†, 1081†, 1112
War and the Railways, 1299*
Canadian Industrial Disputes Act: Investigation of, 754
Canadian Northern:
Electrification at Montreal, 981†, 999*
Report of the Royal Commission, 953, 957
Canadian Pacific:
Annual Report, 820†*, 868
Hospital Cars, 1443*
Lamp, Standard, 18*
Signs, Track, 551*
Tunnel, Connaught, 273*
Canadian Railway Club:
Chilled Iron Car Wheel, The, 278
Scrap or Salvage, 25
Canadian Railway Construction Corps, 1300
Canadian Society of Civil Engineers: Consolidation of Canadian Railroads, 309
Capital (See Finance)
Car:
Armored, Italian, 939*, 1374*
Buffer Cars for Passenger Trains, 615‡

:
Armored, Italian, 939*, 1374*
Buffer Cars for Passenger Trains, 615‡
Coaches, All-Steel; C. B. & Q., 315*
Coaches, All-Steel; Erie, 1472*
Coaches and Baggage Cars; D. & H., 217*.

4!1
Dining; Erie, 950*
Dumper (See Hoisting and Conveying)
Engineering Methods in Construction, 41†
Fire Extinguishers on Passenger Cars, 21
Gear, Foundation, 709*
Hand Car with Power Top, 65*
Hose, Life of, 319
Hospital, 1439*
Inspection, Automobile; Arizona Eastern, 1476*
Inspection, Nichola Cont.

Inspection, Automobie; Arizona Easters 1476*
Inspection, Nichols, 682*
Inspectors, Selection and Training of, 101
Mileage (See Car Service)
Motor (See Motor Cars)
Multiple-Unit; C. N., 1002*
Orders in 1916, 28
Orders in 1917, 297†, 1031†, 1463*
Repairs Vital, 1429*
Step, Extension Coach, 325*
Truck (See Truck)
"Wagonette" Lunch Service; S. P., 838*
Wheel, Chilled Iron, 278
Whoden vs. Steel, 1467†, 1492
Foremen's Association of Chicago:

Car Foremen's Association of Chicago: Breaks-In-Two, Reducing; A. T. & S. Fe., 900 ailments Due to Defective Equipment,

Side Bearing Location, 368* Train Line Maintenance, 319

Train Line Maintenance, 319

Car, Freight:
American and Canadian Built Cars for European Countries, 1463*
Betts Combination Stock and Coal Car, 450*
Box, Long; No. Pacific, 1246*
Capacity and Loading per Loaded Car, Average, 1283*
Committee on Freight Car Thrift of the Railway Business Association, 1116
Hopper; Pennsylvania, 391*
Lubrication in Intercharge, 1039
Refrigerator: Pennsylvania, 179*
Reporting Marks, 1742
Shortage (See Car Service)
Shutter, Ventilating, 190*
Side Baring Location, 368*
Sill Construction, 482
Statistics Show Increased Efficiency, 127†, 145*
Stock, Double-Deck; A. T. & S. Fe., 1151*
Stock, Wooden: I. C., 1356*
Tie; A. T. & S. Fe., 749*
Wooden Equipment, Construction of, 1356*
Car, Passenger (See Car)
Car Service (See also Commission on):
Car Fouslication Flan, 3394, 362

Car, Passenger (See Car)
Car Service (See also Commission on);
Car Equalization Flan, 339‡, 362
Car Equipment Trust of America, 1085‡
Car Supply and Car Mileage, 1907 to 1916, 127‡, 145‡
Centralization of Car Distribution, 1088‡
Committee on Freight Car Thrift, 1116
Conservation, Car, a Patriotic Duty, 1175†
Conservation of Equipment, Railway Storekeepers' Association on, 624
Demurrage, Careful Collection of, 1180‡
Demurrage Rates, New, 757, 796

Car Service (Continued):

Demurrage, Reciprocal, and Car Shortage,

398 Efficiency of Cars, Increasing, 1010 Executive Committee's Freight Car Regulations, 928†, 951, 988‡*, 1134‡, 1351*
Interchange, Car, Contest on, 874†, 1079†, 1175‡

Interchange, Car, Contest on, 8747, 10797, 11757
I. C. C. Given Jurisdiction Over Car Service, 222, 347, 1051, 1154
Loading:
Advertising Heavier, 12217
Car Service Commission's Campaign, 1438, 1475
Car Shortage Would Be Eliminated by Heavier Car Loading, 1282*
Contest Papers on, 1401*
Lumber, Record for, 458*, 719, 1106*, 1208

1208

Pennsylvania's Campaign to Increase, 833*, 1208, 1292 Pennsylvania's Record, 1162 Southern Pacific Statistics, 33 State Commissions' Co-operation, 1438 Western Pacific Statistics, 773‡ Mileage and Car Supply Statistics for 1907-1916, 127†, 145*

1916, 127†, 145*
Pooling:
British Cars, 902, 1356
Equalization Plan, 339†, 362
Government Pool of Transportation and
Coal Recommended, 1480, 1485, 1498
Lake Coal Shipments, 1093
Texas Roads, 371
Reconsignment of Coal Cars in Illinois, 114,
158

Rules, New Code of; A. R. A., 188, 374, 449, 802, 910, 928†, 951, 988‡*, 1134‡, 1352

Rules, New Code of; A. R. A., 188, 374, 449, 802, 910, 928†, 951, 988t*, 1134‡, 1352
Rules, Partial Code of; I. C. C., 126†, 135
Shortage, Freight Car:
A. R. A. Figures, 115, 125†, 240*, 326, 650, 683, 717, 909, 926†, 1208, 1222†, 1467†, 1496
Coal Rates, 128‡, 298†, 301‡
Daniels, W. M., on, 19
Demurrage, Reciprocal, 398†
Government Terminal Elevators at Seaports, 1087‡
I. C. C. Investigation, 15, 126†, 135, 222, 347
Loading, Heavier, Would Eliminate Shortage, 1282*
Recriminations Between Railways, 1132†
Reduction of, 1467†, 1496
Shipper's Appeal to Shippers, A, 616‡, Situation, 241, 287, 312, 331, 332, 347, 333, 371, 373, 374, 449, 616‡, 624, 683†, 749, 855
Ways to Prevent, 302‡
Story of a Freight Car Diversion, 988‡*
Surpluses and Shortages, 1907-1916, 240*
Car Shortage (See Car Service; also Freight—Congestion)
Cement (See Concrete)
Cement-Gun Construction Company: Guncrete for Steel Protection, 558*
Central Argentine: Sale of Securities to American Syndicate, 82†
Central New England: Poughkeepsie Bridge Reinforcement, 455
Central of Georgia:
Accounting Department Military Aid and Comfort Association, 1250
Liquor Transportation, 757
Pencils, Misuse of, 412
Central of New Jersey: Train Schedule from New York to Philadelphia and Proposed War Measures, 982†
Central Railway Club:
Car Inspectors, Selection and Training of, 101
Lubrication of Freight Cars in Interchange, 1039

Lubrication of Freight Cars in Interchange, 1039

1039
Chamber of Commerce of the United States:
Public Interest in Labor Disputes, 198
Chesapeake & Ohio:
Annual Report, 1083†*, 1122
Safety First Work, 459
Signal, Hudson Semaphore, 110
Chicago:

Safety First Work, 459
Signal, Hudson Semaphore, 110
Chicago:
Coal Famine, 115, 158, 233
Electrification Problem, 86‡, 126†
Labor, Union, and Improvement Work, 128‡
Regiment, Third Reserve Engineers, 1196*, 1277*, 1278
Switchmen's Strike Vote, 241, 254†
Chicago & North Western:
Annual Report, 770†*, 810
Engines, Transfer, 698*
Tickets, Multi-Route Interline, 1148*
Chicago Association of Commerce: Report on Railroad Regulation, 241
Chicago Board of Trade:
Car Situation, 331, 373
Griffin's, I. P., Complaint of Grain Shipments from Chicago, 1131†
Chicago, Burlington & Quincy:
Accident near Cromwell, Iowa, 240

Chicago, Burlington & Quincy (Continued): Bridge at Kansas City, Mo., 1181*
Cars, Steel Passenger, 315*
Food Problem, Posters on, 1377*
Lumber, Resawing of, 946*
Relief Department Payments, 1250
Shops at West Burlington, 345*
Snow-Covered Tracks Cleared by Steam, 286

Chicago Car Heating Company: Patent Suits,

Chicago Car Heating Company: Patent Suits, 167
Chicago Great Western: Insurance, Life, for Employees, 459
Chicago, Indianapolis & Louisville: Signals, Automatic Block, 834*
Chicago, Milwaukee & St. Paul: Electric Operation, 642
Electric Coperation, 642
Electric Cocast, 175*, 962
Mississippi River Bridge, 51*
Strike of Freight Car Repairmen, 197
Chicago Pneumatic Tool Company: Annual Report for 1916, 250
Chicago Railway Equipment Company: Annual Report, 423
Chicago, Rock Island & Pacific:
Cribbing Construction, 735*
Installation of Conduits in Retaining Walls, 405*
Pension Payments, 459

Chicago, Rock Island & Pacific:
Cribbing Construction, 735*
Installation of Conduits in Retaining Walls, 405*
Pension Payments, 459
Receivership Terminated, 1223†
Chicago, St. Paul, Minneapolis & Omaha:
Annual Report, 769†*, 812
Mississippi River Bridge, 51*
Chicago Steel Post Company: Fence Posts, 561*
Chicago Steel Post Company: Fence Posts, 561*
China: Graft Under Government Ownership, 1221†, 1246
Chipman Chemical Company:
Meed Killing by Atlas "A" Method, 557*
Christian Science Monitor: Sanctified Mendacity About Railroads, 1270†
Christian Science Monitor: Sanctified Mendacity About Railroads, 1270†
Cincinnati, Hamilton & Dayton:
Accident at Lima, Ohio, 370
I. C. C. Report on, 891
Cincinnati Union Station Project, 327
City Club, Chicago: Remedy for Coal Shortage, A, 233
Civil War:
Ambulance Trains, 1439*
Military Railways, 1387*
Claims (See also Association of Railway Claim Agents; also Freight Claim Association):
Freight Checking System: M. K. & T., 111
Freight Containers and Pilferage, 613†
Live Stock Claims, Reducing, 174‡
Live Stock Claims, Reducing, 174‡
Live Stock Claims, Reducing, 174‡
Clearances (See Legislation; also War)
Clearing House (See Accounting)
Clerk (See Employee)
Cleveland, Cincinnati, Chicago & St. Louis:
Annual Report, 877†*, 923
Terminal Warehouse at Cleveland, 1482*
Coach (See Freigl)
Cochrane, Hon, Frank: Canadian Railways, Annual Statement of, 1497
Coleman Railway Supply Company: Bond-Wire Connector, 1493*
College Men (See Employee)
Cloumbia Creosoting Company: Machine for Perforating Ties, 783*
Commission, Russian, from America, 908, 1012, 1018, 1251, 1448*
Commission, Russian, from America, 908, 1012, 1018, 1251, 1448*
Commission, Russian, from America, 908, 1012, 1018, 1251, 1448*
Commission, Russian, from America, 908, 1012, 1018, 1251, 1448*
Commission, Russian, from America, 908, 1012, 1018, 1251, 1448*
Commission, Russian, from America, 908, 1012, 1018, 1251, 1448*
Commission, Russian, from America, 908, 1012, 1018, 1251, 1448*
Commission, State (See State Commissions)
Commi

Commission, State (See State Commissions)

Committee:
 Central and Regional of the Nat. Ind. Traffic League, 1145, 1240
 Car and Locomotive Builders, 1163
 Coal Production—Prices Fixed, 1498
 Freight Car Thrift, 1116
 Freight Traffic Officers, 717
 Materials and Supplies, 1361*
 Military Equipment Standards, 1273*
 Military Freight Tariffs, 1328*
 Military Freight Tariffs, 1328*
 Military Frasportation Accounting, 1329*
 National Defense District Committees, 1321*
 Public Information, 1207
 Shipping, 908, 1052

Compressor: Gasolene Driven Air, 748*
Concrete (See also American Concrete Insti-

Compressor: Gasolene Driven Air, 748*
Concrete (See also American Concrete Institute):
Crib Retaining Walls: C. R. I. & P., 735*
Fence Post Machine. 610*
Guncrete for Steel Protection, 558*
Masonry, Report of A. R. E. A. on, 659†, 661*
Mixer, Turntable, 562*
Mixing, Pneumatic, Improvements in, 680*
Report of Ioint Committee, 100
Slag as a Concrete Aggregate, 357
Tile, Walter Roofing, 562*
Conduit (See Signaling)

Conference Committee of the Railways: Address of A. B. Garretson, 15 Congestion (See Freight)
Congress (See Legislation)
Congressional Joint Committee on Interstate Commerce: Investigation of Government Regulation, 54, 107, 617, 698, 737, 1033
Connector, Coleman Bond-Wire, 1493*
Conscription (See National Defense)
Conservation, Car (See Car Service)
Conservation of Railway Resources, 1143
Construction Corps (See also Engineering Regiments): Canadian Railway, 1300
Construction, New (See also Grade Crossings, also Bridges and Buildings; also Yards and Terminals; also Station):
Alaska Northern, Progress on the, 828*
Capital Used in 1916, 308
Chicago Improvements and Union Labor, 1283
Conduits Installed in Retaining Walls; C. R. I. 8 P. 405*

1282
Conduits Installed in Retaining Walls; C. R. I. & P., 405*
Cribbing Walls: C. R. I. & P., 735*
Destruction and Re-construction of Railways in War, 1390*, 1452*
Grade Separation Problem at Syracuse, 774*
Location of the Portsmouth & Roanoke, 752
New York Central Castleton Cut-off Plans, 192, 1205
New York Central Improvements in New York City, 1205

New York Central Improvements
York City, 1205
New York Connecting Railroads, 453*, 727†,
748*
Improvements in Baltimore,

Pennsylvania Improvements in Baltimore, 154
Pennsylvania Track Elevation at Johnstown, 1013*
Relocating Terminals to Shorten Engine Districts, 982†
Seaboard Air Line from Hamlet, N. C., to Savannah, Ga., 941*
War Time Work, 1309*, 1468†
Container (See Freight)
Contest:
Car Interchange, 874†, 1079†, 1175†
Exhibit of the National Railway Appliances
Association, 170†, 340†, 477†, 516†, 564†, 606†, 1139*
Increasing the Train Load, 171†, 299†, 611†, 1401* Increas 1401*

Increasing the Train Load, 171†, 299†, 611†, 1401*
Conventions (See also names of associations):
Postponement on Account of War, 871†, 1208
Correspondence, Washington (See also separate headings), 824
Cost (See Equipment and Supplies; also Fuel)
Council of National Defense (See National Defense)
Coverdale & Colpitts: Report on the Missouri, Kansas & Texas, 255†, 263
Crane (See Hoisting and Conveying)
Credit (See Finance)
Creel, George: Valuation Reports and Reproduction Cost, 254†
Croesote (See Ties and Timber)
Cribbing (See Walls)
Crosshead, Markel, for Fastening Shoes, 196*
Crossing (See Grade Crossings)
Cunningham, A. O.: Mattress for Bank Protection; Wabash, 321*

D

Dallas, Texas: Signaling in the Union Terminal, 279

Daniels, W. M.: Reappointment to the Interstate Commerce Commission, 44†, 55, 73, 107, 144

Delano, F. A.: Appointment to the Interstate Commerce Commission, 1469†

Delaware & Hudson:
Annual Report, 822†*, 863
Coaches and Baggage Cars, 217*, 411
Locomotive, Consolidation, Quickly Repaired, 1370*
Securities Held Abroad, 697

Locomotive, Consolidation, Quickly Repaired, 1370*

Securities Held Abroad, 697

Delaware, Lackawanna & Western:
Annual Report, 4357*

Dock, Coal, at Buffalo, 185*
Grade Separation Problem at Syracuse, 774*

Station at Buffalo, 227*

Dempsey, J. Edwin: Codes Adopted by National Defense Committee, 1111

Demurrage (See Car Service)
Denver & Rio Grande: Pensions for Employees, 1163

Department (See Organization)
Depreciation (See Accounting; also Valuation)
Derailment (See Accident)
Despatching (See Train Despatching)
Destruction (See Car)
Dining Car (See Car)
Dining Car (See Employee)
Discipline (See Employee)
Discipline (See Employee)
Discon, George D:
Freight Rate Increases and Food Prices, 998
Freight Rate Increases and the Utilities

Freight Rate Increases and the Utilities
Bureau, 852
Dock (See Piers)
Dodgson, Frank L.: Freight Train Time Improved by Automatic Signals, 1424
Domestic Engineering Company: Delco Light
Plant, 607*
Draft Gear:
Key Attachment, Murray, 1493*
Sills, Freight Car, Construction of, 483

Drawing Room and the Shop, 727†, 730‡
Drill (See Track)
Duddley, P. H.: Interior Transverse Fissures, 55*
Duluth & Iron Range: Dock at Two Harbors,
Minn., 303*
Duluth, Missabe & Northern: Coach Step, Extension, 325*
Dumper (See Hoisting and Conveying)

Earnings (See also Revenues and Expenses; also names of companies):
Canadian Railways' Results for 1916, 887
Comparison of 1917 with Previous Years, 431†, 459, 1177†
Figures for 1916, 42†, 169†, 211†, 213†
Misleading Comparison of March Earnings in the New York Tribune, 1029†
Taxes, Percentage Paid in, 83†, 213†
Trainmen's Earnings in 1916, 454
U. S. Steel Corporation, 208
Economic Club of New York: Garretson, A. B., Address of, 1†
Economic Club of New York: Garretson, 94
Economic Practices:
Clerical Waste, Elimination of, 1326
Dining Car Service, Waste in, 1079†, 1467†
Fuel (See Fuel)
Letter Files and Carbon Copies, 302‡
Lumber, Reclaiming, 946*
Office Supplies, Standardization of, 871†
Paper, Waste, Collected; Penna., 239
Pencils, Misuse of; C. of G., 412
Savings by the Despatcher, 442, 1471‡
Scrap and the Spring House Cleaning, 815†
Scrap, Breaking; B. R. & P., 844*
Scrap Yard, Central, 25
Waste, Elimination of, 1221†
Economy Devices Corporation: Truck, Pedestal, 744*
Education:
Apprentice Squad; Southern Railway, 802

Apprentice Squad; Southern Railway, 802 Car Inspectors, Selecting and Training of, 101 College Men in Railway Service, 82†, 300‡, 432†, 437*, 615‡, 734‡, 1129†, 1150, 1470‡
Long Island Mathematics Course, 197
Man Problem on the Railroads, The, 234
Schools for Women, 1407*, 1495
Telegraph School; S. P., 1163
"Traffic Service Bureau," A, 1495
Eight-Hour Day (See Employee—Wages)
Electric Locomotive (See Locomotive)
Electricity as an Aid to Railroad Operation, 1395*
Electrification:
Canadian Northern at Montreal, 981†, 999*

Electricity as an Aid to Railroad Operation, 1395*

Electrification:
Canadian Northern at Montreal, 981†, 999*
C. M. & St. P., Data on Operation, 642
C. M. & St. P., Data on Operation, 642
C. M. & St. P., Data on Operation, 642
C. M. & St. P., from Othello, Wash., to Pacific Coast, 175*, 962
Chicago Problem, 86‡, 126†
Electrical Night of the New York Railroad Club, 641
Electrical Testing, R. S. A. Report on, 494*
Electricity, A. R. E. A. Report on, 535*
English Progress, 352
Lehigh Valley Plans, 285
Long Island's Evergreen Branch, 753
Maintenance of Electric Locomotives; N. Y. N. H. & H., 129*, 445*, 611†
Maintenance of Electric Locomotives; N. & W., 768†
Stinemetz, W. R., on, 306
Elevator (See Yards and Terminals)
Elgin, Joliet & Eastern: Valuation Report, Tentative, 323, 714
Elliott, Howard: Resignation from the New Haven, 905, 1066
Ely, Theodore N.: Firebox, Wide, Invention of, 173*, 256\$
Embargo (See Freight)
Employee (See also Education; also Officer): Athletic Meets on Various Roads, 253†, 257*
Baltimore & Ohio Employees in War Time, 1306
Bonus; Northern Pacific, 1063
Car Inspectors' Work, 101
Clerical Waste, Elimination of, 1326
College Men in Railway Service, 82†, 300‡, 432*, 437*, 615‡, 734‡, 1129†, 1150
Conductors, Instructions to; B. & O., 212†, 224.
Discipline and the Superintendent, 339†, 343‡, 344‡
Discourtesy to Employees, 300‡, 615‡
Enzineer (See Officer)
Full Crew Law in New Jersey, 197, 371, 434*, 463, 646, 1063
Full Crew Law Repeal as a War Measure, 815†, 1029†, 1063, 1180‡
Hours of Service Report, 112
Insurance, Life; C. G. W., 459
Labor:

Advertising Man on, The, 14
America and England in the War, 1367*
Machines in the Accounting Depart-

or: Advertising Man on, The, 14 America and England in the War, 1367* Machines in the Accounting Depart-ment, 1457 Machines in the Accounting ment, 1457
Public Interest in Labor Disputes, 198
Settlement of Controversies, 1†
Shortage for Track Work, 384†, 1315
Unionism, Menace of, 128‡

ployee—Labor (Continued):

War and Labor Disputes, 801
War, Problem After the, 739
Lehigh Valley's Instructions, 624
Liberty Loan, 1058, 1079†, 1094, 1149, 1197, 1206, 1249
Man Problem on the Railroads, The, 234
Mechanical Men, Enlistment of, 1411
Passes, Pullman, 300‡, 615‡, 734‡
Pensions:
Chicago, Rock Island & Pacific, 459
Denver & Rio Grande, 1163
Norfolk & Western, 754
Pennsylvania, 281
War Policy of Railroads, 1348
Promotion, Preparing for, 85‡, 1180‡
Relief Department Payments; C. B. & Q., 1250
Relief Department Payments; Penna., 370
Selling Passenger Service, 26
Strike: Employee-Labor (Continued):

Selling Passenger Service, 20
Strike:

Brotherhoods Threaten Strike—Negotiations with Railroad Managers, 4331, 456, 475, 4761, 629
Chicago, Milwaukee & St. Paul Freight Car Repairmen, 197
Chicago Switchmen, 241, 254†
Illinois Central, 197, 239
Prevention Laws, 17, 27, 437, 53, 811, 178, 261, 3427
Wages:

178, 261, 342†

Wages:

Adamson Law Constitutioual, 612†, 631

Advertising the Labor Controversy, 14

Eight-Hour Day and Fuel Costs, 981†

Eight-Hour Day Demand, 14, 17, 42†,

81†, 111, 125†, 390‡, 433†, 456, 475,

476†, 503, 629

Eight-Hour Day Law, 2†, 43†, 53, 61,

106, 143*, 178, 223, 261, 503, 612†,

631, 684†

Eight-Hour Day on the Alaskan Government Railway, 816†

Enlisted Men, 1301, 1348, 1411

European Increases and Freight Rates,

265

Fireman's Point of View, A, 390‡

Enlisted Men, 1301, 1348, 1411
European Increases and Freight Rates, 265
Fireman's Point of View, A, 390t
Increases in, 114, 281, 326, 411, 646, 718, 753, 907, 963, 1063, 1112, 1163, 1205, 1495
Shop Man's Pay, The, 50
Telegraphers; N. Y. N. H. & H., 281
Trainman, Work of the, 17
Trainmen's Earnings in 1916, 454
War Policy of Railroads, 1348
Women Car Cleaners, Uniforms for, 1085t*
Women on American Railways, 963, 1062*, 1066*, 1163, 1407*, 1457, 1496
Women on Canadian Railways, 1933*
Women on English Railways, 1085t*, 1409*
Yard Service and Terminal Service, 42†
Engine (See also Locomotive):
Districts, Shortening, 982†
Failures and Repairs, 1346
Portable Gas, 682*
Terminal, 1346
Engineer (See Officer; also American Railway Engineering Association)
Engineering Methods in Car Construction, 41†
Engineering Methods in Car Construction, 41†
Engineering Megiments to France, 871†, 895, 1004, 1093, 1099, 1138, 1196*, 1274*
England:
Ambulance Trains, 1441*

Engineering Methods in Car Construction, 417
Engineering Regiments to France, 871†, 895, 1004, 1093, 1099, 1138, 1196*, 1274*
England:
Anhulance Trains, 1441*
British Armies in France, 784, 1449
Electrification Progress, 352
Labor's Part in the War, 1368
Locomotives, War, 1383*, 1456*
Mechanical Men, Shortage of, 1411
Operation of Railways During War, Julius H. Parmelee on, 872†, 901
Organization of Railways for War, Henry W. Thornton on, 1271*
Women Engine Cleaners, 1085‡*
Women, Experience in Employing, 1409*
Equipment and Supplies (See also Car; also Locomotive):
American and Canadian Built Equipment for European Countries, 1463*
Equipment to Move an Army, 1003
Car and Locomotive Builders, Committees of, 1163
Car Equipment Trust of America, 1085‡
Cars and Locomotives Ordered in 1916, 28
Cars and Locomotives Ordered Since January 1, 1917, 297†, 1031†, 1463*
Cost in 1915 and in 1917, 464, 1165, 1359*
Electric Equipment, 1399*
Exports for Eight Months, 1092
Italian War Commission to Purchase, 1063*
Labor Saving Equipment, 1318*, 1457
Material Situation and Maintenance, 1359*
Purchasing of, Unintelligence in, 169†
Rails and Track Materials Produced in 1916, 936, 1138
Selling Supplies Abroad, 43†
Testing Department and Purchases, 339†
Tools, Buying, 254†, 386†
Wooden Freight Cars Constructed, 1356*
Wooden Freight Cars Constructed, 1356*
Wooden Freight Cars Constructed, 1356*
Wooden Passenger Cars vs. Steel, 1467†, 1492

Erie:
Car, Dining, 950*
Car, Steel Passenger, 1472*
Women Employees, 1407*, 1496
Erie Canal History, 1206

[Illustrated articles are indicated thus *; Editorials thus †; Letters to Editor thus ‡.] Firebox (See Locomotive)

Fires (See also National Fire Protection Association):

Baltimore & Ohio Fire Fighters, 110
Extinguishers on Passenger Cars, 21
Fuel Oil Furnaces, Hazard of, 317
Kindling Fires in Locomotives, 1056
Lantern, Hand, Hazard of the, 634
Miscellaneous, 67, 110, 154, 197, 239, 281, 370, 459, 796, 851
Pennsylvania's Report for 1916, 239
Protection of Property Through Policing, 940

940 Southern Pacific's Protection System, 627* Sprinklers for Freight Houses; Penn., 183† Union Switch & Signal Company at Swiss-vale, Pa., 294, 327

Fiscal Year (See Accounting)
Flag (See Signaling)
Flange Lubricator (See Lubrication)
Food Problem (See Agriculture; also Public,
The Railways' Relations with; also War)

Foreclosure Sale (See Finance) Form G (See Train Rules)

Ethical Culture Society: Work of the Trainman, 17

Europe:
Equipment Built in America, 1463*
Fuel Shortage, 1295*
Protection of Railways, 715
Railway Mans, 1340
Railroads Meeting Second Great Trial, 1453
Transportation Muddle and the War, 189
Transportation of Military Traffic, 1334
Traveling in War Time, 231
Wage Demands and Freight Rates, 265
War Loan Advertising, 816†, 835*
Executive Committee of the American Railway
Association Special Committee on National Defense:
Conventions Discouraged, 1208
Dempsey Telegraphic Codes Adopted, 1111
Freight Train Schedules, 1394
Mobilization of Freight Cars, 928†, 951, 9881*, 1134*, 1351*
Organization, 769†, 777*, 817†, 824, 845*, 985†, 1267*, 1321*
Passenger Service, Curtailment of, 982†, 1092, 1159, 1163, 1255, 1500
Sub-Committees (See Committee)
Ways to Increase Efficiency, 1010
Work of, 1092, 1145, 1322, 1474
Exhibits (See also names of associations):
Contest on Exhibit of the National Railway
Appliances Association, 170†, 340†, 477†, 516†, 564†, 606†
Suggestion for Atlantic City Exhibitors, 732‡
Expenses (See Revenues and Expenses)
Expenses:
Revenues and Expenses for October, 1916, 717
Revenues and Expenses for Year 1916, 647
Extinguisher (See Fires) Ethical Culture Society: Work of the Trainman, 17

Revenues and Expenses for Year 1916, 647 Extinguisher (See Fires) Fairbairn, J. M. R.: Lamp, Standard; Can.
Pacific, 18*

Fairbanks, E. & T. & Co.: Track Scale, Plate
Fulcrum; Pennsylvania, 395*
Fairbanks, Morse & Co.:
Inspection Car, Nichols, 682*
Power Plant for Hand Cars, 65*
Fargo Manufacturing Company: Grounding Devices, 510*
Farming (See Agriculture) Farming (See Agriculture)
Federal Regulation (See Government Regulation)
Federal Regulation (See Government Regulation)
Federal Trade Commission:
Pooling of Transportation and Coal by Government Recommended, 1480, 1485, 1498
Report on Bituminous Coal Situation, 1095
Feed Water (See Locomotive)
Felton, Samuel M.: Regiments Organized for Foreign Service, 1274*
Fence Post (See Posts)
Files (See Office)
Finance (See also Accounting; also Valuation; also Revenues and Expenses):
Canadian Railways (See Canada)
Capital for New Construction in 1916, 309
Central Argentine Note Purchase, 82†
Chicago. Rock Island & Pacific Receivership Ended, 1223†
Credit, Julius Kruttschnitt on, 699
Dividend Rates in 1916, 68
Earnings in 1916, 42†, 169†, 211†
Failure of Plans; Southern and New York Central, 383†
Foreclosure Sales in 1916, 60
I. C. C. Report on the Pere Marquette and the C. H. & D., 891
Liberty Loan, 1058, 1079†, 1094, 1149, 1197, 1206, 1249, 1433
Missouri, Kansas & Texas' Prospects for 1920, 929†
Missouri, Kansas & Texas Reorganization—Coverdale and Kendrick Reports, 255†, Farming (See Agriculture)
Federal Regulation (See Government Regula-Missouri, Kansas & Texas Prospects for 1920, 929†
Missouri, Kansas & Texas Reorganization—
Coverdale and Kendrick Reports, 255†, 263, 341†, 365, 401*, 929†
Monthly Analysis of Operating Expenses, 21, 215‡
New Haven Problems, 905*
New York Central Stock Sale, 125†
Operating Income Decline in 1916, 42†, 169†, 211†
Operating Income, Expenses and Taxes, 1891-1916, 83†, 213†
Pere Marquette Reorganization, 41†, 839*, 891

Preparedness. Barriers to. 355 Securities, Advertising and Selling, 816†, 835*

Securities Held Abroad, 697 Security Issues, Regulation of, 253‡ Security Holders' Organization, 1107, 1130†, 1471‡

14712 Taxation and Earnings, 1891-1916, 83†, 213† Taxation Bill, War, 1003, 1061, 1098 Taxes of Railroads in Wisconsin, 718 War's Effect on, 1431 "Watered" Stock, 89

Form G (See Train Rules)
France:
Accident at Chateauneuf, 198
Ambulance Trains, 1441*
British Armies in France, 784, 1449
Locomotives for War Service, 1383*
Mission, American, 1275, 1428*
Railways Behind the Front, 1449*
Regiments, American Engineering, 895, 1004, 1093, 1099, 1138, 1196*, 1274*
Selling and Advertising War Bonds, 816†, 835* Transportation in War Time, 189 Verdun, Attack Upon, 1450* Verdun, Attack Upon, 1450°
Freight:
Billing, Revision of, 49
Classification, Consolidated, Proposed, 944
Congestion at Seaports—Government Terminal Elevators Advocated, 1087‡
Congestion in West, 29, 243, 287, 312, 331, 353, 415, 466, 758, 855
Congestion, W. M. Daniels on, 19
Containers and Pilferage, 613†, 773‡
Embargoes, 114, 242, 332, 374, 910, 1116, 1422
Loss and Damage (See Claims) Loss and Damage (See Claims) Priority of Shipments During War, 1051, 1097, 1154, 1243, 1312, 1486 Station Efficiency Inspection; M. K. & T., Tractor-Trailer Methods of Handling, 792 Freight Car (See Car, Freight)
Freight Car Shortage (See Car Service)
Freight Claim Association: Annual Convention,
1483 Freight Claims (See Claims)
Freight Claims (See Claims)
Freight Rates:
Advance Rate Case:
Dixon, George D., on, 852, 998
Hearings, 929†, 937, 989*, 1017, 1030†, 1045*, 1109, 1135, 1166, 1201, 1233*
Increases Asked for, 686†, 705, 728†, 742, 787, 796, 825, 852, 873†, 878
National Association of Owners of Railroad Securities on, 1206, 1234
Rea, Samuel, on, 908, 990
Shippers' Opposition to Increases, 818†, 837, 878, 956, 1136, 1202
Testimony of Railway Executives, 989*, 1030†, 1045*, 1233*
Average Rate in 1916, 253†, 262
C. F. A. Class Rate Hearings, 242, 415, 466, 650
City Delivery Costs More Than Freight, 930 City Delivery Costs More Than Freight, 939 Coal, A Sliding Scale on, 128‡, 298†, 301‡ Coal Rates in Illinois, 719, 757, 802 Coal Rates to Philadelphia Reduced, 650 European Wage Demands and Rate Increases, 265 creases, 265
Illinois Five Per cent Case Lost, 757, 802
Increases Throughout the World, 1110
Missouri, Increases in, 757
New Jersey, Rates from Western Points to,
71, 116, 159, 201, 967
New Mexico, Interstate Rates in, 1500
Reconsignment Tariffs, Hearing on, 1069
Shreveport Rate Case, 222, 826
Shippers and the Transportation Problem,
5‡ Slag, Lawsuits to Recover Charges on, 1207
Suspension of Increased Rates, Bill to Require, 1052, 1098
Transcontinental Rate Case, 743, 794
Frog (See Track)
Frog Switch & Manufacturing Company:
Grinder, Swing Frame, 559*
Front (See War)
Fuel (See also International Railway Fuel Association):
Coal: ciation):
Coal:
Chicago, Famine at, 115, 158, 233
Loader, Rands, 559*
Powdered, 1230
Prices and Car Shortage, 128‡, 298†, 301‡
Shicag to be Fixed by Committees, 1498

Fuel—Coal (Continued):

Pulverized Plant at Marceline, Mo.; A. T. & S. Fe, 237*
Report of Federal Trade Commission, 1095, 1480, 1485, 1498
Shortage, A Remedy for, 233
War and the Coal Supply, 932‡, 1295*
Costs and the Eight-Hour Day, 981†
Economy and the Transportation Department, 1029†
Economy Suggestions of the International Railway Fuel Association, 1157
Graphic Display of Daily Records, 1105*
Locomotives, Waste in, 442, 1471‡
Oil Furnaces, Fire Hazard of, 317
Oil, Increased Use of, 1490
Pulverized, 1230
Speed Recorders and Fuel Economy, 47‡
War and the Fuel Situation, 1295*
Full Crew Law (See Employee; also Legislation) Fuel-Coal (Continued): tion)
Fuller Engineering Company: Coal Plant, Pulverized; A. T. & S. Fe., 237*

Garretson, A. B.: Address on Settlement of Labor Disputes, 1†
Gear (See Car)
General Railway Signal Company:
Lock, Electric Bolt, 514*
Interlocking on New South Wales Government Lines, 63*
Generator, Locolight Headlight, 949*
Germany:
Military Railways vs. Motor Trucks, 1449*
Organization, Railway, for War, 1338
Railway Situation, 1455
Gibbons, Cardinal: American Railways, 708
Gorman, James E., 1487*
Gould Coupler Company: Car Lighting Patent
Case, 123
Government Ownership:
Acworth, W. M., on, 1033
Alaska Northern and the Eight-Hour Day,
816†
Canada, Results in, 172†, 181, 309, 734‡ Rothern and the Eight-Hour Day, 816†
Canada, Results in, 172†, 181, 309, 734‡
Canadian Royal Commission's Reports, 953, 957, 985†, 1081†, 1112
China, Graft in, 1221†, 1246
Freight Car Provision, 1270†
Gibbons, Cardinal, on, 708
Manila Railroad—Eugene E. Reed Appointed President, 211†
New Zealand, Results in, 872†
Senators' Debate on Government Economies, 384†
Terminal Elevators at Second Appointed President, 2117
Terminal Elevators at Second Appointed President, 217
Terminal Elevator Appointed President Appointed President Appointed President Appointed President Appointed President 384†
Terminal Elevators at Seaports, 1087‡
Government Railways of New South Wales:
Interlocking at Flemington, 63*
Government Regulation:
Chicago Association of Commerce on, 241
Daniels, W. M., Case of, 44†, 73
Economic Club of Washington's Discussion,
94 Chicago Association of Commerce on, 241
Daniels, W. M., Case of, 44†, 73
Economic Club of Washington's Discussion, 94
Freight Cars, Providing, 1270†
Government and the Railways in This War, 1030†
Interest of Private Property in, 601*
Needs of Florida, 197
Newlands Committee Investigation, 54, 107, 617, 698, 737, 1033
"Philadelphia Plan," 240, 1066
Pooling of Transportation and Coal, 1480
Post Office Department, 2†
Railway Business Association Annual Dinner, Discussions at, 82†, 87
State and Federal Laws Conflicting, 81†, 355, 826, 1416
State Commissions, Personnel of, 685†, 687
State Regulation of Security Issues, 253†
War, Effect on, 1415*
Grade Crossings:
Arizona, Construction Rules in, 961
Bell, U. S. & L., 561
California Commission's Investigation, 340†, 349*
Pennsylvania, Standard Signs in, 961
Separation Problem at Syracuse, 774*
Signal, Flash-Light, 1061*
Signals at Highways: A. C. L., 1040*
Signals in Illinois, 110, 431†
Stop, Look and Listen Rule, 216‡, 245, 431†
Grand Trunk:
Chamberlin, E. J's., Reply to Investigators, 1112
Watch Inspectors' Convention, 239
Gray, John H.: Appointment to Valuation Advisory Board, 169†
Gray, Peter & Sons: Lamp, Electric Signal, with Reflector, 889*
Great Britain (See England)
Grinder (See Track)
Ground (See Pipe)
Guard (See National Defense)
Guncrete (See Concrete)
Gustin-Bacon Manufacturing Company: Air Pump Strainer, Locomotive, 192*
Gwynn, Walter: Report on Location of the Portsmouth & Roanoke, 752

H

Hall, Henry C., 628*
Harrison, Fairfax: Railroads' War Board,
Work of, 1092, 1474
Haskell & Barker Car Company, Inc.:
Annual Report, 764
Tie Cars: A. T. & S. Fe, 749*
Headlight (See Locomotive)
Hell Gate Bridge, 453*, 727†
Highway Crossing (See Grade Crossings)
Hine, Charles: Railroad Employees in War
Time, 1306
Hocking Valley: Annual Report, 1178†, 1213
Hodges, George, 844*
Hoisting and Conveying:
Bucket, Blaw Excavating, 608*
Crane, Electric, 1399*
Crane for Breaking Scrap; B. R. & P., 844*
Dumper, Box Car; D. L. & W., 185*
Dumper, Coal Car; B. & O., 1226*
Loader, Rands Coal, 559*
Tackle for Unloading Automobiles, 1156*
Unloader, Box Car; D. L. & W., 185*
Hospital Car (See Ambulance Trains)
Howard, James E.: Transverse Fissures, Study
of, 623, 1086‡
Hudson Railway Signal Company: Semaphore
near Richmond; C. & O., 110
Hunt, Robert W.:
Test, All-Ingot, for Steel Rails, 896
Tests on Track Insulation, 314
Hyatt Roller Bearing Company: Tests on Journal Friction, 560*

Illinois Central: nois Central:

Annual Report, 1032†*, 1077
Car, Wooden Stock, 1356*
Cast Iron Pipe Records, 1491
Grade Crossing Safety Campaign, 411, 431†
Jack, Reinforced Concrete Smoke, 224*
Resistance Tests of Passenger Trains, 407*
Signaling Work, 1160*
Strike of Maintenance of Way Men, 197, 239 lack, Reinforced Concrete Smoke, 224*
Resistance Tests of Passenger Trains, 407*
Signaling Work, 1160*
Strike of Maintenance of Way Men, 197, 239
Terminal Plans in Chicago, 126†
Tornadoes, Damage by, 1164
Water Supply and Cost, 740, 903
Illinois Manufacturers' Association:
Car Service Rules, Protest Against, 374
Rate Advances Favored, 910
Illinois Passenger Rate Case (See Passenger Fares)
Illinois Railroad Committee: Rate Increases, Reasons for, 796
Illumination (See Lighting)
Immigration After the War, 739
Improvement (See Construction, New)
Industrial Organizations in War, 1341*
Ingersoll-Rand Company: Pneumatic Equipment for Drilling Screw Spikes, 748*
Inspection Car (See Car; also Motor Cars)
Insurance (See Employee)
Interborough Rapid Transit Company:
Rattery Charging Sets, 238*
Signaling Work in New York City, 379
Interchange Car Inspectors' and Car Foremen's Supply Men's Association Organized, 917
Intercolonial Railway: Government Ownership Results, 172†, 181, 309, 734‡
Interlocking (See Signaling)
International Railway Fuel Association:
Annual Convention, 925†, 1053, 1067, 1080†, 1101
Powdered Coal, 1230
Suggestions for Conserving Fuel, 1157
International Signal Company: Automatic Train Stop, Webb, 789*
International Trade Press, Inc., 424
Interstate Commerce Commission:
Accident Bulletins, 272, 1057, 1080†
Accident Report—Pennsylvania at Mount Union, 1030†, 1056
Car Service Jurisdiction Granted, 222, 347, 1051, 1154
Car Supply Investigation, 15, 126†, 135, 241, 312, 353
Clements, Judson C., Death of, 1313
Daniels, W. M., Reappointment of, 44†, 55, 73, 107, 144
Delano, F. A., for Member, 1469†
Freight Rate Increases in C. F. A. Territory, 242, 415, 466, 650
Hours of Service Report, 112
Mail Pay Rates—Statement of the Postmaster General, 443
Members of, 691, 1415*
Membership, Bill to Increase, 347
New Jersey, Rates from Western Points to, 71, 116, 159, 201, 967
Office Building, New, 1099
Plan for a Representative Commission, 343‡
Report of Division of Safety, 24
Report of Division of Safety, 24
Report of

Interstate Commerce Commission (Continued): Interstate Commerce Commission (Continued):

Statistics of Operating Revenues, Expenses, etc., 1891-1916, 213†

Trainmen's Earnings in 1916, 454

Transcontinental Rate Case, 743, 794

Valuation (See Valuation)

Violations of Commerce Law by Shippers, 433†

Work, Statistics of, 1488

Interstate Commerce Commission Rulings:

Agricultural Implements, Export Rates on, 72

433† Work, Statistics of, 1488
terstate Commerce Commission Rulings:
Agricultural Implements, Export Rates on,
72
Alaska Investigation, 1255
Blackstrap Molasses from Gulf Ports, 968
Roston-New York Proportional Rates, 467
Car Spotting Charge, 243
Cement from Troy, N. Y., 1070
Cement to Kentucky, 159
Cincinnati Switching Absorption, 1117
Class Rates from Ohio Points to the Southeast, 1021
Cleaning Stock Cars, Charge for, 115
Coal for Pennsylvania Mines, 72
Coal to La Crosse, Wis., 969
Coal to Nashville, Tenn., 803
Complaints Dismissed, 1117
Cotton Goods from the Southeast, 968
Cotton to New England Points, 1117
Dairy Products, Rates on, 803, 968, 1117
Demurrage on the New Haven, 159
Embargoes on Hay at New York, 803
Fourth Section Applications, 968
Fresh Meats from St. Louis, 1117
Fruits and Vegetables, 758, 969
Gasolene from Coffeyville, Kan., 467
Grain, Export, Advances on, 115, 159
Grain from Vicksburg, Miss., 968
Grain to Cairo, Ill., 855
Grain to Little Rock, Ark., 1117
Grand Trunk Operation of Canada Atlantic Transit Company, 720
Headlight Order, 1†, 29, 1495
Ice from Wisconsin, 968
Illinois Passenger Fares, 73, 81†, 117, 348, 967, 1069, 1116, 1208, 1223†, 1486, 1501
Iron and Steel, Export Rates on, 244, 375
Iron Ore Rate Cases, 969
Lake and Rail Rate Cancellations, 71, 1209
Lake and Rail Rate Cancellations, 71, 1209
Lake and Rail Rates, 467, 720, 968, 1167
L. C. L. Minimum Handling Charges, 758
Lumber from Oklahoma, 288
Lumber from Oklahoma, 288
Lumber from Oklahoma, 288
Lumber from Oklahoma, 289
Peddler Car Minimum, 467
New Orleans and Galveston to Missouri River Cities, Rates from, 1209
New Orleans and Galveston to Missouri River Cities, Rates from, 1209
New Orleans Terminal Allowances, 243
New York Commutation Fares, 33
Packing House Products from Houston, Tex., to Points in Oklahoma, 1070
Paper from Michigan, 288
Petroleum to St. Louis, 968
Petroleum to St. Louis,

969
Rice from California, 71
Rice from Texas, 467
Rules of Practice Revised, 1117
St. Louis to Illinois Points, Rates from, 1070

1070

1070

1070
Safety Appliance Act Extended, Time on, 1018, 1070
Southern Pacific's Ownership of Atlantic Steamship Lines, 416
Storage Charges on Export Grain, 201
Sulphuric Acid from New Orleans, 33
Switching Cars of Coal to the Akron, Canton & Youngstown, 1070
Switching Charges at Richmond, Va., 1117
Switching Charges on Grain at Milwaukee, 1070

Telegraph Message Unrepeated, 1209
Thompson's Point, N. J., Rates from, 33
Trackage Agreement, Restrictions of a, 1070
Transcontinental Rates, 72, 467, 743, 794
"Two for One" and "Follow Lot" Rules,

Wheat Products from Utah, 243
Wisconsin Rate Cases, 1209
Wisconsin Rate Cases, 1209
Fig. 1, 243
Wisconsin Rate Cases, 1209
Fig. 2, 243
Fig. 1, 243
Fig

: Armored Trains, 939*, 1374* Transportation System in War Time, 57* War Commission, 1063*

Jack. Reinforced Concrete Smoke, 224*
Jefferson Construction Company: Seaboard Air
Line from Hamlet, N. C., to Savannah,
Ga., 941*
Jeffery, Edward T., 66*
Joffre, General: Railways in War, 1269†, 1307

Joint Committee on Concrete and Reinforced Concrete: Report of, 100

Joint Congressional Committee on Interstate Commerce: Investigation of Government Regulation, 54, 107, 617, 698, 737, 1033

Journal (See Bearings)

Kansas City Southern: Valuation Protest and Hearings on, 139, 254†, 745 Kendrick, J. W.: Report on the M. K. & T., 341†, 365, 929† Keyoke Railway Equipment Company: Draft Gear Attachment, 1493*

Labor (See Employee; also War; also Legislation; also Maintenance of Way)
Lackawanna Steel Company: Annual Report,
424
Lamps (See Lighting)
Lancashire & Yorkshire: Women Engine Cleaners, 10852*
Lantern (See Lighting)
Law (See Legislation)
Legal Decisions:
Accident Suit and Subsequent Changes in Signals, 41†, 117
Accidents at Crossings, 160, 216‡, 245, 375, 652, 759, 856, 871†, 1022, 1071, 1210, 1502
Adamson Law Held Constitutional, 612†, 631, 684†
"Approach to Bridge," 803
Arkansas 2-Cent Fare Statute, 1169
Attraction to Children, 971, 1502
Automatic Couplers, Necessity for, 1022
Automatic Couplers, Necessity for, 1022
Automatic Couplers on Interstate Interurban Railways, 720
Raltimore & Ohio's Contract with the Western Union Telegraph Co., 326
Bill of Lading Issued After Shipment, 245
Bill of Lading Law, 651
Bill of Lading Law, 651
Bill of Lading Notice, 720
Bills of Lading, Spurious, 856
Carmack Amendment, 468, 970
Commission Cannot Order Construction of New Lines—A. T. & S. Fe vs. California Railroad Commission, 162
Commission Paid to Forwarder Is a Rebate;
Lehigh Valley, 912
Commission Paid to Forwarder Is a Rebate;
Lehigh Valley, 912
Commissioners' Order Not a Rule, 1118
Common Carrier Must Carry Passengers, 289
Conductor's Duty to All Passengers Alike, 418
Consignee Must Receive Partially Damaged Goods, 117
Construction of Embankment Against Floods, 651
Contract to Transport for Life, 244
Damages, Excessive, 244, 376, 417, 418, 970, 1502
Damages for Overcharge—Discrimination in Use of Cars, 35
Damages for Wrongful Removal of Earth. Labor (See Employee; also War; also Legisla-tion; also Maintenance of Way) Lackawanna Steel Company: Annual Report,

1502 Damages for Overcharge—Discrimination in Use of Cars, 35 Damages for Wrongful Removal of Earth, 720

720
Damages, Punitive, 288
Dayton Flood Case, 160
Demurrage Charges—"Seasonal Tariff," 721
Demurrage Rule—Private Cars, 333
"Depot"—Texas Statute, 34
Dipping Cattle, 34
Drovers as Passengers, Status of, 721
Ejection Without Demand for Fare, 332
Embankments and Surface Water, 161
"Engaged in Interstate Commerce," 469, 1169
Expense of Safety Appliances at Grade

Engaged in Interstate Commerce," 469, 1169
Expense of Safety Appliances at Grade Crossing, 289
Federal Employers' Liability Act, 34, 468, 721, 911, 970, 971, 1071, 1168
Fencing Statutes Not Applicable to Trespassing Human Beings, 333
Fires, Damages from, 244, 289, 333, 651
Flooding, Damages for, 34, 1118
Freight Charges, Collection of, 803, 804
Freight Stored in Transit, Liabilities for, 118
Georgia Whistling-Post Law, 1257

118
Georgia Whistling-Post Law, 1257
Goods Stolen by Railroad's Employees, 417
Grade Crossing Elimination—Distribution of
Cost, 468, 856
Hauling Defective Cars to Repair Points,

Hauling Defective Cars to 1911
Headlight, Want of, 34
Hours of Service Act, 161, 162, 244, 970, 971, 1071, 1257, 1502
Initial Carrier Agent of Connecting Line,

Initial Carrier Agent of Connecting Line, 244
Initial Carrier and Freight Damages, 160
Injuries to Employees, 118, 161, 202, 289, 417, 468, 469, 911, 970, 971, 1022, 1071
Injuries to Passengers, 34, 117, 161, 202, 759, 804, 970, 1118
"Interstate Passenger," 651
Interstate Shipment Diverted, 289
Jurisdiction as to Flagmen at Crossings, 1021
Jurisdiction of Interstate Commerce Commission, 35
L. & N. Bridge at Ohio Falls, 73
Land Grant Suit—Government vs. Southern Pacific, 912

[Illustrated articles are indicated thus *; Editorials thus †; Letters to Editor thus ‡.]

Legal Decisions (Continued): Lease, Free, of Factory Site by Carrier, Lehigh Valley Water Line Divorced, 721 Liability of Consignor for Freight Charges, 970 Limited Valuation of Shipments, 244 Liquor Transportation of Dry States, 73, 721, 804 Louisiana Stop, Look and Listen Rule, 216‡, Mail Divisor Case; C. & A. and Y. & M. V., 118 Mail Sacks Thrown from Moving Train, 759 Main Sacks I Brown from Moving Train, 759
Maintenance of Industry Tracks, 971
Mann Act, 118
Mechanics' Liens Against Railroads, 376
Monopoly in Use of Track, 202
Nebraska Freight Speed Law, 333
Noise from Spur Track Switching, 245
Notice of Arrival of Freight, 911
Notice of Claim for Damages, 160, 244, 289, 417, 468, 1021, 1022, 1257
Notice of Special Damages by Delay, 376
Operation of Industry Track by Shipper, 160
Passenger and Carrier, Relation Between, 289
Passenger Intoxicated, Care of 376, 419 Passenger and Carrier, Relation Between, 289
Passenger Intoxicated, Care of, 376, 418
Passenger Ejected from Train, 721, 759, 804, 1167
Passenger Rates in Illinois, 73, 81†, 117
Passes, Frec, 244, 289, 1022
Patent Suits, 123, 167, 1505
Private or Carriers' Track, 468
Reorganization, Objection to a Plan of, 856
Right of Way Deeds, 160, 970, 1071
Rights of Way Through Forest Reservations; C. M. & St. P., 1258
Rules as to Car Inspection, 911
Safety Appliance Act, 162, 911, 1210
Separation of Races in Mississippi, 245
Shippers Liability for Freight Charges, 720
Side Track Facilities, Providing, 332
Southern Pacific Retains Central Pacific, 651, 683†, 702
Special Train Rates, 1168
Stop. Look and Listen Rule, 160, 161, 202, 2164, 245, 804, 970, 1071, 1118, 1210, 1502
Storage Charges for Travelers' Baggage, 1022 Storage Charges for Travelers' Baggage, 1022 1022
Subsidies in Aid of Railroads, 161
Suspension of Penalty During Pendency of
Injunction Suit, 759
Switches for Abutting Mills, 161
Taxation, Double, 1022
Taxation on Main Line Only, 856
Taxes on Leased Corporations, 721
Taxing Statute, Kentucky; L. & N., 1502
Telephones in Stations in Nebraska, 117
Terminals, Owner's Exclusive Right to Use, 856 Ticket Agents' Authority to Arrest Offenders, 804
Track Scale, Contract for Construction of, Track Scale, Contractions of the Contraction of the Transportation and Switching Rates, 971 Trespassing Cases, 117, 160, 804 Twenty-Eight Hour Law, 333 Wolhaupter Tie Plate Patent, 1505 Workmen's Compensation Laws, 418, 1118 Legislation:
Adamson Act. 2†, 43†, 53, 61, 106, 143*, 178, 223, 261, 503, 612†, 631, 684†
Canadian Industrial Disputes Act, 754
Car Service Bills, 179, 222, 347, 1051, 1098, 1154
Cleven Law Extension, 348 Car Service Bills, 179, 222, 347, 1031, 1038, 1154
Clayton Law Extension, 348
Clearance Bill, 178
Clearance Order in Illinois, 684†, 704*
Congress and the Strike Menace, 342†
Congressional Inquiry on Railroad Regulation, 54, 107, 617, 698, 737, 1033
Daniels, W. M. and the Senate, 144
Daylight Saving Bill, 1113, 1205, 1495
Esch Bill, 222, 1051, 1154
Flood Control Work, 371
Full Crew Bill in Texas, 1029†, 1050
Full Crew Law in New Jersey, 197, 371, 434†, 463, 646, 815†, 1063
Illinois Passenger Fare Case, 73, 81†, 117, 348, 967, 1069, 1116, 1208, 1223†, 1486, 1501 1501 Labor Bills in Congress, 143, 261, 317, 409, Lawsuits to Recover Freight Charges on Slag, 1207
Liquor Transportation in Georgia, 757
Locomotive Inspection Laws and Rules. 750
Massachusetts State Board of Trade, Resolutions of, 33
Pomerene Bill, 1154
Post Office Appropriation Bill, 1†, 31, 281, 987†
President to Take Railroads, Bills to Authorize, 223†, 825

Legislation (Continued): Priority Bill, 1051, 1097, 1154, 1243, 1312, Proposed, 60, 94, 184, 237, 271, 784, 832, 886, 1051, 1097, 1186 Senators' Debate on Government Economies, 384†
State and Federal Laws Conflicting, 81†,
355, 826, 1416
State Laws, New, 767†, 791, 1197
Strike Prevention Bills, 1†, 27, 43†, 53, 81†,
178, 261, 342†
Violations of Laws, 326, 433†, 646, 851
War Taxation Bill, 1003
Webb Bill, 43†, 154, 281, 1496
Webb-Kenyon Law Constitutional, 73
igh Vallev: Webb Bill, 434, 154, 281, 1496
Webb-Kenyon Law Constitutional, 73
Lehigh Valley:
Annual Report, 1224†*, 1261
Commission to Forwarder a Rebate, 912
Electrification Plans, 285
Employees and the Public, 624
Explosion at Black Tom, Report on, 754
Locomotives, Pacific and 2-10-2 Type, 897*
Water Line Divorced, 721
Liberty Loan (See War)
Light Railways in the War, 1364*, 1451*
Lighting:
Electric Light Plant, Delco, 607*
Fixtures, Concealite, 557*
Headlight (See Locomotive)
Illumination of Shops, 1398*
Lamp Design; R. S. A. Report, 483*
Lamp, Electric Signal, with Reflector; N. Y. N. H. & H., 889*
Lamp, Standard: C. P., 18*
Lantern, Fire Hazard of the, 634
Protective, 1399
Liquor (See Legal Decisions; also Legislation)
Loader (See Hoisting and Conveying)
Loading (See Car Service; also Train Loading)
Load (See War)
Location (See Construction New; also Camps)
Lock (See Signaling)
Loco Light Company: Headlight Generator, 949* Locomotive: omotive:

American and Canadian Built Locomotives for European Countries, 1463*

Atlantic Type, Tests of; Pennsylvania, 612†, 635*

Boiler Metal Treatment, Perolin, 148

Brick Arch Tests; Pennsylvania, 926†, 933*

Capacity, Increasing, 1347

Decapod; Pennsylvania, 1241*, 1471‡

Duplex; Southern Ry., 267*

Electric:

Canadian Northern, 1001* Duplex; Southern Ry., 267
Electric:
Canadian Northern, 1001*
Maintenance of; N. Y., N. H. & H., 129*, 445*, 611†
Maintenance of: N. & W., 768†
Mechanical Design of, 13
Pennsylvania, 1199*
Engines, Sma#, in the War, 1383*
Engines, Transfer; C. & N. W., 698*
Feed Water Heating, 1080†, 1101
Firebox Development—Messrs, Milholland's and Ely's Share in, 173‡, 256‡
Firebox, McClellon Water-Tube, 781*
Firebox Volume and Boiler Performance, 840*
Fuel (See Fuel) 840*
Fuel (See Fuel)
Grate Area Limitations and the Stoker, 196
Headlight Generator, Locolight, 949*
Headlight Order, I. C. C., 1†, 29, 1495
Inspection Laws and Rules, Purposes of Kindling Fires, 1056 Lubicator, Flange, 153* Madrid, Zaragoza & Alicante of Spain, 785* Madrid, Zaragoza & Alicante of Spain, 785°
Maintenance in War Time, 1343°
Mikado and Consolidation Types Compared; Pennsylvania, 1176†, 1187°
Orders in 1916, 28
Orders Since Jan. 1, 1917, 297†, 1031†, 1463°
Pacific and Santa Fe Types; L. V., 897°
Recorder, Speed and Fuel Economy, 47
Repairs, Quick, to a Consolidation Type; D. & H., 1370°
Rod Packing and Swab Holder, 738°
Russia. Shortage in, 1490
Shoe Fastening, Markel Crosshead, 196°
Snow Cleared by Steam; C. B. & Q., 286
Strainer, Air Pump, 192°
Triplex; Virginian, 141°
War Engines at the Front, 1383°
War Locomotives Built in America, 1456°
Warer Conditions in the Boiler, 359°
Women Engine Cleaners, 1085;*
comotive, Electric (See Locomotive) ocomotive, Electric (See Locomotive) Locomotive, Electric (See Locomotive)

Long Island:
Annual Report, 819†*
Commutation Traffic, 199
Electrification of Evergreen Branch, 753
Food Train, 1067, 1379*
Mathematics Course for Employees, 197
Passenger Fare Increase, 719

Loomis, Edward E., 364*
Loree, L. F.: Securities Held Abroad, 697

Los Angeles & Salt Lake:
Campaign to Increase Earnings, 200
Train, Demonstration, 1381*
Loss and Damage (See Claims)
Louisiana: Statute Requiring Stop at Crossings, 216‡, 245
Louisville & Nashville:
Bridge at Ohio Falls, 73
Signaling, Absolute-Permissive, 134*
Signaling, Absolute-Permissive, 134*
Signaling, absolute-Permissive, 130*
Taxation in Kentucky, 1502
Louisville, Henderson & St. Louis: Electric Light Plant, 607*
Lubrication:
Flange Lubricator, 153*
Freight Cars in Interchange, 1039
Luitwieler Pumping Engine Company: Pumping Head, 561*
Lumber (See Ties and Timber)
Lumber Manufacturers' Agency: Loading Record, 719 M

McClellon, James M.: Firebox, Water Tube, 781* 781*
McGraw-Hill Publishing Company, Inc., 380
McKeen Motor Car Company: Motor Car;
Southern Utah, 148*
Machine (See Office; also Posts)
Macon Terminal Company: Union Passenger
Facilities, 693*
Madrid, Zaragoza & Alicante: Locomotives, 12Wheel Passenger, 785* Mail:
Magazines and Newspapers, Proposed Increases on, 1†, 31, 281, 987†
Pay Rates and Statement of the Postmaster General to the I. C. C., 443, 881
Postal Service, Management of, 2† General to the I. C. C., 443, 881
Postal Service, Management of, 2†
Maintenance of Equipment:
Car Repair, 1429*
Electric Locomotives; N. Y., N. H. & H., 129*, 445*
Electric Locomotives; N. & W., 768†
Locomotives in War Time, 1343*, 1370*
Signal Facilities, 1427
Maintenance of Way:
Ballast, Report of A. R. E. A. on, 578*
Labor Shortage and the War, 1314*
Labor Supply for Track Work, 384†
Material Situation Reviewed, 1359†
Road Building and Labor, 984†, 1225‡
Manganese Track Society: Frog, Improved Design of, 1192*
Manila Railroad: Reed, Eugene E., Appointed President, 211†
Map (See also Annual Reports):
Army Camps, Location of, 1339*
Civil War, Railroads in, 1389*
European Railway, 1340
Markel, Charles: Crosshead for Fastening Shoes, 196*
Massonry (See Concrete)
Massachusetts Institute of Technology. Masonry (See Concrete)
Massachusetts Institute of Technology: Conservation of Railway Resources, 1143
Massachusetts State Board of Trade: Legislation Needed, 33
Massey Company, C. F. Jack, Reinforced Concrete Smoke, 224*
Master Car Builders' Association:
Exhibitors at June Convention, 413, 733‡, 801 Exhibitors at June Convention, 413, 7331, 8011
Freight Car Sill Construction, 484
Mechanical Associations, Closer Co-Operation for, 926†*
Mechanical Engineers' Activities, 872†
Reporting Marks on Freight Cars, 174‡
Materials (See Equipment and Supplies)
Materials and Supplies, Sub-Committee on, 1361*

Mattrees for Bank Protection, Wahash, 321* Materials and Supplies, Sub-Committee on, 1361*

Mattress for Bank Protection, Wabash, 321*
Mechanical Department Associations, Closer Co-Operation for, 266†*

Mechanical Department Engineering, 683†, 691, 727†, 731‡, 767†, 817†, 872†

Mechanical Department Men in Military Service, 1411

Mechanical Design of Electric Locomotives, 13

Mechanical Valuation Committee, Midwestern, 351

Meet (See Organization)

Mexico, Conditions in, 956, 1225

Michigan Central: Annual Report, 876†, 921

Midvale Steel & Ordnance Company: Annual Report, 424

Mileage: Car Mileage Statistics, 1907 to 1916, 127†, 145*

Milholland, James: Firebox, Wide, Invention of, 173‡, 256‡

Millitary Aspect of Railroad Preparedness, The, 1412*

Millitary Committees (See Committee)

Military Railways (See also Light Railways).

1412*
Military Committees (See Committee)
Military Railways (See also Light Railways),
1337, 1387*, 1414, 1449*
Military Traffic (See Traffic)
Mission (See also Commission) to France, 1275,
1428*
Missouri Kansas and Tayro Missouri, Kansas and Texas: Annual Report, 45†*

Missouri, Kansas & Texas (Continued):

Freight Claim Prevention, 463
Passenger Fare Discrimination—Complaint to I. C. C., 159
Prospects for 1920, 929†
Reorganization—Coverdale and Kendrick Reports, 255†, 263, 341†, 365, 401*, 929†
Station Efficiency Check, 111
"Texas Special," Operated Jointly with the St. L.-S. F., 373, 383†
Transportation Expenses, 401*
Missouri Pacific: Elimination of Waste, 1221†
Mixer (See Concrete)
Monon (See Chicago, Indianapolis & Louisville)
Monnee Calculating Machine, 458*
Morgan's Louisiana & Texas: Loading Record with Lumber, 458*
Motion Pictures (See Safety First)
Motor Cars:
Inspection Car, Nichols, 682*
Mudge Types, 681*
Power Plant for Hand Cars, 65*
Railway Motor Car Company's Car, 556*
Southern Utah McKeen Car, 148*
Train Rights; Western Maryland, 640
Motor Drive for Shop Tools, 1395*
Motor Trucks:
Circus Transportation, 281

Motor Trucks:
Circus Transportation, 281
War Service, 1449*
Mount Union Collision; Pennsylvania, 371, 385†, 404*, 459, 615‡, 730‡, 988‡, 1030†, 1056

Muchnic, Charles M.: Russian Railway Situa-

Mudge & Co.: Motor Cars, 681*

Mutual Fire, Marine & Inland Insurance Company: Preserve as Well as Produce, 940

M. W. Supply Company Rail Bender, Vaughan Type, 560*

N

Nashville, Chattanooga & St. Louis: Supplies,
Increased Cost of, 464
National Association of Manufacturers: Elimination of Waste, 1221†
National Association of Owners of Railroad Securities:
Freight Rate Advance Case, 1206, 1234
Meeting at Baltimore, 1107, 1130†, 1471‡
Officers, 1497
National Chamber of Commerce: Annual Meeting, 239
National Defense (See also War; also Executive Committee):

Committee):
Advisory Commission, 285, 308, 409, 434†
Army, Equipment Needed to Move an, 1003
Car Service Rules, 928†, 951, 988‡*, 1134‡,
1352

Committee (See Committee)
Conscription Endorsed by the Railways, 907,

925†
Council of National Defense Created, 285, 308, 409, 434†, 1321*
Dempsey Telegraphic Codes Adopted, 1111
Embargo on Arms to Mexico, 910
Guarding Railroad Property, 328, 940, 943*, 1445*
Labor Discusses Positions

Embargo on Arms to Mexico, 910
Guarding Railroad Property, 328, 940, 943*, 1445*
Labor Disputes During the War, 801
Passenger Service, Reductions in, 926†, 982†, 1092, 1159, 1163, 1185, 1255, 1500
Preparing for War, 817†, 824
President to Take Railroads, Bill to Authorize, 223, 825
Publicity Agents Offer Services, 851
Railroads' War Board's Organization, 769†, 777*, 817†, 824, 845*, 985†, 1267* 1321*
Railroads' War Board's Work, 1092, 1145, 1322, 1474
Trespassers, A Warning to, 816†, 1130†
National Fire Protection Association: Annual Meeting, 1044
National Industrial Traffic League:
Central and Regional Committees Appointed, 1145, 1240
Demurrage Rules Approved, 757
National Lumber Manufacturers' Association:
Car Service Rules, 802
National Railway Appliances Association:
Annual Meeting, 552
Exhibit, Contest on, 170†, 286, 340†, 477†, 505*, 516†, 564†, 660†, 1139*
Officers and Members, 501*, 517
National Safety Council: Bulletins on Safe Practices, 281
Newark, N. J. Traffic Club: Take Employees Into Your Confidence, 624
New England Railroad Club: Electrification for Steam Railroads, 306
New Jersey Freight Rate Complaint, 71, 116, 159, 201
New Jersey State Chamber of Commerce: Full Crew Law Investigation, 197, 371, 434†, 4364, 646

New Jersey State Chamber of Commerce: Full Crew Law Investigation, 197, 371, 434†, 463, 646
Newland's Committee (See Government Regulation)
New Mexico: Freight Rates, Interstate, Increased, 1500
New Orleans, Texas & Mexico: Valuation Protest, 154, 254†

RAILWAY AGE GAZETTE-Index

New South Wales: Interlocking on Government
Lines at Flemington, 63*
Newton Machine Tool Works, Inc.: Rail Drilling Machine, 410*
New York Business Publishers' Association:
Conscription Endorsed, 907, 925†
Co-operation with the Government and Increased Postage Rates, 987†
New York Central:
Annual Report, 874†*, 919
Bridge at Castleton, 192, 1205
Dudley, P. H., on Interior Transverse
Fissures, 55*
Financing Plan Abandoned, 383†
Grade Separation Problem at Syracuse,
774*
Improvements in New York City, 1205 Financing Plan Abandoned, 383†
Grade Separation Problem at Syracuse, 774*
Improvements in New York City, 1205
Insulation of Rails on Trough Floor of Harlem River Bridge, 616‡*
Lubricator, Flange, 153*
Stock Sale, 125†
New York Connecting Railroad Finished, 453*, 727†, 748*
New York, New Haven & Hartford:
Annual Report, 930†*, 977
Automatic Train Stop, Webb, 789*
Electric Locomotives, Maintenance of, 129*
Elliott, Howard, Resolution to, 1066
Elliott, Howard, Resolution to, 1066
Elliott, Howard, Succeeded by E. J. Pearson, 905*
Organization, Divisional, 1111
Passenger Service, Reductions in, 1163
Shops for Electrical Equipment at Van Nest N. Y., 445*, 611†
Signal Lamps with Reflectors, 889*
New York Railroad Club:
Electrical Night, 641
Railway Water Supply, 903
New Zealand: Government Ownership Results, 872†
Nichols, Geo. P. & Bro.: Inspection Car, 682*
Ninth Street Terminal Warehouse Company, The: Warehouse at Cleveland, 1482*
Norfolk & Western:
Annual Report, 768†, 771†*
Electric Locomotives, Maintenance of, 768†
Electric Locomotives, Maintenance of, 768†
Electric Department Established, 754
Northern Pacific:
Accident Prevention, 1012
Bonus to Unorganized Employees, 1063
Bureau of Efficiency's Work, 851, 1012
Cars, Long Box, 1246*
Freight Train Time and Automatic Signals, 1424
Northern White Cedar Association: Service

Northern White Cedar Association: Service Reports, 608* Nut, Roller Lock, 640*

0

Office: L. C. C.'s New Building, 1099
Letter Files and Carbon Copies, 302‡
Machine, Monroe Calculating, 458*
Machines, Labor Saving, in the Accounting Department, 1457
Private Offices for Train Despatchers, 256‡
Reports, Eliminating Useless, 1326
Supplies, Standardization of, 871†
cer:

Officer: Engineer in Railway Service, The, 82†, 300‡, 432†, 437*, 727†, 1129†, 1150, 1470‡ Engineers as General Managers, 727† Engineers, Mechanical, at Convention of the A. R. M. M. Assn., 767† Engineers, Professional Ethics for, 599* Man Problem on the Railroads, 234 Recriminations Between Railways, 1132 Salaries and Work, 729† Salaries of Engineering Graduates in Railway Service, 1129†, 1150. Superintendents and Discipline, 339†, 343‡, 344‡

Salaries of Engineering Graduates in Railway Service, 1129†, 1150.

Superintendents and Discipline, 339†, 343‡, 344‡
Oil (See Fuel; also Lubrication)
Operating Efficiency (See also Electrification; also Train Despatching; also Train Operation):
Car Inspection, Importance of, 101
Clearance Records Essential to Military Operations, 1320
Clerical Waste, Elimination of, 1326
Co-operation Between the M. K. & T. and the St. L.-S. F., 373, 383†
Freight Operation, Monthly Reports of, 1394
Loads Distributed on Trains, 47‡, 300‡*, 615‡, 731‡*.
Performance Statements; M. K. & T., 401
Schedules for Extra Trains, 3†, 5‡
Shortening Engine Districts, 982†
Terminals in War Time, 1420*
Tonnage, Conditions Affecting, 848, 945
Track Capacity Increased by Signaling, 1423*
Operating Income (See Finance)

Operating Income (See Finance)
Organization (See also National Defense; also
War):
American Gear Manufacturers' Assn., 754
Central of Georgia Accounting Department
Military Aid and Comfort Association,
1250
Chicago Regiment—The Third Reserve Engineers, 1196*, 1277*, 1278
Divisional; N. Y. N. H. & H., 1111
Man Problem on the Railroads, The, 234

Organization (Continued): menization (Continued):

Mechanical Department Conventions, Closer Co-operation for, 926†*

Mechanical Department Efficiency, 683†, 691, 727†, 730†

Meets, Athletic, 253†, 257*
Officers and Salaries of, 729†

Pacific Railway Club, 754

Records, Eliminating Useless, 1326

Security Holders, 1107, 1130†, 1471‡, 1497

Testing Department's Value, 339†

P

Pacific Railway Club:
Military Aspect of Railroad Preparedness,
The, 1412*
Organization of, 754
Wollner, William S., on National Railway
Efficiency, 1422
Packing, Paxton-Mitchell Rod, 738*
P. & I. Post Mould Company: Machine, Concrete Fence Post, 610*

Packing, Paxton-Mitchell Rod, 738*
P. & I. Post Mould Company: Machine, Concrete Fence Post, 610*
Passenger Fares:
Baggage Charges in Iowa, 373
British Increases During War, 872†, 901
Illinois Rate Case, 73, 81†, 117, 348, 967, 1069, 1116, 1208, 1223†, 1486, 1501
Increases Throughout the World, 1110
Long Island Railroad Increases, 719
Missouri, Increases in, 757
Missouri, Kansas & Texas and Interstate
Fare Discrimination, 159
Passenger Service:
B. & O. Circular to Conductors, 212†, 224
Dining Car Service, Waste in, 1079†, 1467†
Pullman Reservations, 1469†
Reductions in, 926†, 982†, 1092, 1159, 1163, 1255, 1500
Selling, 26
Passes (See Employee; also Legal Decisions)
Pattent (See Legal Decisions)
Pattent (See Legal Decisions)
Patton-Mitchell Company: Rod Packing and Swab Holder, 738*
Pay (See Employee; also Mail)
Pearson, E. J., 905*
Peking Gazette: Car Hire and Graft in China, 1221†, 1246
Pennsylvania Lines (See Pennsylvania Railroad)
Pennsylvania:
Accident at Bristol, Pa., 371, 463
Accident at Mount Union, Pa., 371, 385†, 404*, 459, 615‡, 730‡, 988‡, 1030†, 1056
Annual Report, 386†*, 427
Athletic Meet at Altoona, Pa., 253†, 257*
Bridge at Manayunk, Pa., 883*
Car, Hopper, 391*
Car Loading Record, 1162
Car Loading Campaign, 833*, 1208, 1292
Car Movement in May, 1255
Car, Refrigerator, 179*
County, A. J., on Railroad Conditions, 355
Dixon, George D., on the Rate Advance
Case, 852, 998
Embargo Committee, 374
Engineers as General Managers, 727†
Fires in 1916, 239
Hell Gate Bridge, 453*, 727†
Improvements in Baltimore, 154
Liberty Loan Plans, 1198
Locomotive, Decapod Type, 1241*, 1471‡
Locomotive, Decapod Type, 1241*, 1471\$
Locomotive, Decapod Type, 1241*, 1471\$
Locomotive

Locomotive, Electric, 1199*
Lumber Conference Committee Established, 466
Motion Pictures and Safety First, 318
Passenger Service, Reductions in, 1185
Paper, Waste, Collected, 239
Pension Changes, 281
Pier at Baltimore, 1089*
Relief Payments in 1916, 370
Scale, Track, at Pitcairn, Pa., 395*
School for Women Employees, 1407*
Signals, Position Light, 324*
Sprinklers for Freight Houses, 183*
Tests of an Atlantic Type Locomotive, 612†, 635*
Tests of Mikado and Consolidation Type
Locomotives, 1176†, 1187*
Track Elevation at Johnstown, Pa., 1013*
Train Schedule from N. Y. to Philadelphia and Proposed War Measures, 982†
Western Union Telegraph Service, 1468†
Women, Employment of, 963, 1407*
asion (See Employee)
Marquette:
I. C. C. Report on, 891

Pension (See Employee)
Pere Marquette:
 I. C. C. Report on, 891
 Reorganization Plan, 41†, 839*, 891
Perolin Railway Service Company: Boiler Metal
Treatment, 148
"Philadelphia Plan" of Railway Regulation, 240,
1066
Piors:

Piers:
Baltimore & Ohio Pier and Car Dumper at
Curtis Bay, 1226*
D. L. & W. Coal Dock at Buffalo, 185*
Duluth & Iron Range Ore Dock at Two
Harbors, Minn., 303*
Piferage (See Train Robberies)
Pipe:

Pipe:
Cast Iron, Life of; I. C., 1491
Grounding Devices, Fargo, 510*
Lead Welding Outfit, 680*
Pneumatic Placing Company: Concrete Mixing
Improvements, 680*
Pole (See Ties and Timber)
Pooling (See Car Service)

[Illustrated articles are indicated thus *; Editorials thus †; Letters to Editor thus ‡.]

Portsmouth & Roanoke: Lo lion, Report on,

Portsmouth & Roanoke: Lo .ion, Report on, 752
Post Office (See Mail)
Posts:

Machine for Manufacturing Concrete Fence Posts, 610*
Report of A. R. E. Association, 516†, 525*
Steel Fence, 561*
Powdered Coal (See Fuel)
Power Top Car, Sheffield, 65*
Preparedness (See War; also Finance)
Press (See Public, The Railways' Relations with)
Pressed Steel Car Company:
Annual Report, 381
Eric Coaches, 1472*
Prest-O-Lite Company, Inc.: Lead Welding Outfit, 680*
Price (See Valuation; also Fuel—Coal)
Protective Materials Corporation: Trackoline Weed Killer, 679*
Public, The Railways' Relations with:
Anybody Can Kick a Railroad, 6‡
Business Management, Unintelligence in, 169†
Food Prices and Freight Rate Increases, 998

169†
Food Prices and Freight Rate Increases, 998
Food Waste in Dining Car Service, 1079†
Get Together and Do Some Thinking, 47‡
Grade Crossings, Responsibility at, 431†
Interest of Private Property in Regulation,

Interest of Private Property in Regulation, 601*
Labor Disputes and Public Interest, 198
Press and the Railroads, 960
Public Attitude Toward Railways, 87
Pullman Reservations, 1469†
Selling Passenger Service, 26
Shippers and the Car Shortage Situation, 616‡

Shippers and the Rate Advance Case, 818†, 837, 878
Shippers and the Transportation Problem, 5‡
Shippers' Violations of Commerce Law in 1916, 433†
Supply Houses and Foreign Trade, 43†
Public Utility Commissioners, 685†, 687
Pullman Company:
Passes for Railway Employees, 300‡, 615‡, 734‡
Reservations. Instructions Concerning, 1469‡

734‡
Reservations, Instructions Concerning, 1469†
Pump (See Water Service)
Purchases (See Equipment and Supplies)
Purdue University: Engineering Graduates, Occupations and Salaries of, 1129†, 1150

Bender, Vaughan Type Samson, 560*
Drilling Machine, Newton, 410*
Insulating Rails on Trough Bridge Floors;
N. Y. C., 616‡*
Problem, A New, 1062
Production Statistics, 936, 1138, 1360
Recorder. Baldridge Contour, 609*
Report of A. R. E. A. on, 544*
Rerolling by New Process, 1161*
Spikes Placed with Pneumatic Drills, 748*
Test, An All-Ingot, 896
Transverse Fissures, J. E. Howard on, 623, 10864 1086‡

Transverse Fissures, P. H. Dudley on, 55*
Railroads' War Board (See Executive Committee: also National Defense)
Railway Business Association:
Annual Dinner, 82†, 87
Committee on Freight Car Thrift, 1116
War Time Service, 936
Railway Car Manufacturers' Association: Goss,
W. F. M., Elected President, 295
Railway Club of Pittsburgh:
Firebox Volume and Boiler Performance,
840°

Man Problem on the Railroads, The, 234
Railway Construction Corps, Canadian, 1300
Railway Development Association: Annual Convention, 1059

Railway Construction Corps, Canadian, 1500
Railway Development Association: Annual Convention, 1059
Railway Educational Bureau: Operating Conditions Affecting Tonnage, 848, 945
Railway Executives' Advisory Committee:
Advertising for the Farmer, 459
Railway Fire Prevention Association: Fire Extinguishers on Passenger Cars, 21
Railway Motor Car Company of America: Car, A Novel, 556*
Railway Signal Association:
Annual Convention, 4754, 4774, 478*
Meeting in New York, 1248
Registration, 502, 565, 660
Report on D. C. Automatic Block Signaling, 499
Report on Electrical Testing, 494*
Report on Harmonizing of Specifications, 490*
Report on Lightning Protection, 485*

Report on Lightning Protection, 485* Report on Maintenance and Operation,

Report on Mechanical Interlocking, 487* Report on Signaling Practice, 477†, 479* Report on Standard Designs, 483* Report on Storage Equipment, 499*

Railway Steel-Spring Company: Annual Report, 424
Railway Storekeepers' Association:
Conservation of Equipment, 624
Data in Annual Proceedings, 383†, 390‡
Railway Supply Industry in the War, 1463*
Railway Supply Manufacturers' Association:
Convention Postponed, 852
Exhibitors at June Convention, 413, 801
Range Finder, Young, 369*
Ransome Concrete Machinery Company: Concrete Mixing Improvements, 680*
Rates (See Freight Rates; also Passenger Fares; also Interstate Commerce Commission Rulings)
Rea, Samuel: Freight Rate Advance Case, 908
Receivership (See Finance)
Reconsignment (See Grap)
Reconsignment (See Car Service)
Record (See Organization)
Recorder (See Locomotive; also Rail)
Recrimination (See Officer)
Red, Eugene E.: Appointed President of Manila Railroad, 211†
Regiment (See War)
Regulation (See Government Regulation)
Reid-Newfoundland Railroad: Accident near Glenwood, N. F., 287
Reorganization (See Finance)
Repairs (See Maintenance of Equipment)
Report (See Office)
Resistance (See Train Resistance)
Resources, Railway, Conservation of, 1143
Revenues and Expenses:
Bureau of Railway Economics' Summary for Fiscal Year 1916, 253†, 262
Bureau of Railway Economics' Summary for Fiscal Year 1916, 253†, 262
Bureau of Railway Economics' Summary for Fiscal Year 1916, 253†, 262
Bureau of Railway Economics' Summary for Griscal Year 1916, 253†, 262
Bureau of Railway Economics' Summary for Genery, 649; January, 768*, 800; February, 927*, 962; March, 1164; April, 1496
Expenses, Increases in, 728†, 767†, 768†, 117†
Expenses, Operating, Monthly Analysis of, 21, 215‡
Express Companies for October, 1916, 717

Expenses. Operating, Monthly Analysis of, 21, 215‡ Express Companies for October, 1916, 717 Express Companies for the Year 1916, 647 I. C. C. Statistics, 1891-1916, 213† Net Operating Income for 1915 and 1916, 42†, 169†, 211† Transportation Expenses Analyzed, 21, 215‡ Transportation Expenses on the M. K. & T., 401* nforced Rail Joint Company: Tests on Track

401*
Reinforced Rail Joint Company: Tests on Track
Insulation, 314
Rigging (See Brake)
Road Building Should Be Encouraged, 984†,
1205t

Rigging (See Brake)
Road Building Should Be Encouraged, 984†,
1225‡
Roadway, Report of A. R. E. A. on, 564†, 588*
Roberts & Schaefer Company: Rands Coal
Loader, 559*
Rod (See Locomotive)
Rodenbur, John T.: Coach Step, 325*
Roller Lock Nut, 640*
Roofing (See Bridges and Buildings)
Roumania: Accident at Tshura, 198
Royal Commission of Canada: Report on the
Railway Situation, 953, 957, 985†, 1081†,
1112
Rules (See Train Rules; also Car Service)
Russia:
Commission from America, 908, 1012, 1018,
1251, 1448*, 1490
Locomotives, Shortage of, 1490
Locomotives, War, 1383*, 1456*
Railway Situation, 1454

S

St. Louis: Controversy with the Terminal Railroad Association Settled, 1131†
St. Louis Brass Manufacturing Company: Lighting Fixtures, 557*
St. Louis Railway Club:
Election of Officers, 851
Locomotive Inspection Laws and Rules, Purposes of, 750
St. Louis-San Francisco:
Right of Way Rented for Garden Purposes, 754
Stations. Passenger. Standard Form of

Stations, Passenger, Standard Form of,

Story of a Freight Car, 111
Supplies, Increased Cost of, 464
"Texas Special" Operated Jointly with the
M. K. & T., 373, 383†
St. Paul & Tacoma Lumber Company: Lumber
Loading Record, 1106*, 1208
St. Paul Union Depot Company: Station Plans,
1041*
Safety Appliances:

1041*
Safety Appliances:
Inspection Service, 102
I. C. C. Grants Time Extension, 398, 1018,

1070

Safety First (See also Accident; also Grade Crossings: Alabama Great Southern Awarded Harriman Memorial Medal, 753 Baltimore & Ohio Report for 1916, 852 Baltimore & Ohio Suggestions for Soldiers Guarding Railways, 1019, 1446*

Safety First (Continued):

Car Inspector and Safety, 101 Chesapeake & Ohio, 459 Full Crew Laws as Measures of Safety,

Full Crew Laws as Measures of Safety,
434†
Illinois Central, 411, 431†
Motion Pictures; Pennsylvania, 318
National Safety Bulletins, 281
Report of Division of Safety, 24
Salary (See Officer)
Savings (See Economic Practices)
Scale (See Weighing)
Schedule (See Train Operation)
School (See Education)
Scraw Spike (See Spike)
Seaboard Air Line:
Bulletin on the Elimination of Waste, 1221†
Construction of Line from Hamlet, N. C.,
to Savannah, Ga., 941*
Portsmouth & Roanoke Railroad Location,
752
Security (See Finance)

752
Security (See Finance)
Selling Passenger Service, 26
Semaphore (See Signaling)
Shipper (See Public, the Railways' Relations with)
Shoes (See Locomotive)
Shores

Shoe (See Locomotive)
Shops:

C. B. & O., at West Burlington, 345*
Drawing Room Efficiency, 727†, 730‡
Electricity, Application of, 1395*
Machine Tool Equipment, 254†, 386†
N. Y., N. H. & H. at Van Nest, N. Y.,
445*, 611†
Scheduling System Advocated, 431†
Schop Man's Duties and Wages, 50
Shutter (See Car, Freight)
Signaling (See also Railway Signal Association):
Absolute-Permissive; L. & N., 134*
Annual Bulletin of the I. C. C., 1492
Automatic Block and Freight Train Time;
No. Pacific, 1424
Automatic Block; Chic., Ind. & Louisville,
834*
Automatic Train Stop, Webb, 789*

Automatic Train Stop, Webb, 789*
Battery Charging Sets; I. R. T., 238*
Battery Waterbury R. S. A. Primary, 511
Bell, U. S. & S. Crossing, 561
Blue Safety Device, 1494*
Caution Signal, Disregarding the, 730‡, 988‡, 1180‡

Caution Signal, Disregarding the, 730‡, 988‡, 1180‡
Conduits Installed in Retaining Walls; C. R. I. & P., 405*
Flagging and Yard Limit Boards, 988‡
Flagging Unnecessary, 773‡
"Flagman, Automatic," Three—Aspect, 65*
Flash-Light Crossing Signal, 1061*
"Hold-Main" Signals at Lafollette; L. & N., 1203*
Hudson Signal near Richmond; C. & O., 110
Illinois Central Main Line, 1160*
Interlocking at Flemington, New South Wales, 63*
Interlocking in the Dallas Terminal, 279*
Lamps with Reflectors; N. Y., N. H. & H., 889*
Lock, G. R. S. Electric Bolt, 514*
Maintenance Work, 1427
Motor Car Operation; West, Maryland, 640
New York City; I. R. T., 379
Position Light Signals; Pennsylvania, 324*
Report of A. R. E. Association, 522*
Semaphores for Highway Crossings, 1040*
Union Switch Movement and Other Developments, 512*
War and Track Capacity, 1423*
Inst.

Signs:

Report of A. R. E. Association, 516†, 525*
Track; Canadian Pacific, 551*
Sill (See Draft Gear)
Simonds, Frank H.: British Armies in France, 784
Slag (See Concrete)
Smith, A. H.: Minority Report on the Canadian Railway Situation, 957, 985†
Snow Protection on the Southern Pacific, 626*
Society of Terminal Engineers, 198
Southern Hardwood Traffic Association: Rate Advances Opposed, 910
Southern Pacific:

Southern Pacific:

Southern Pacific:
Car Loading Statistics, 33
Central Pacific Separation Suit of the Government, 651, 683†, 702
Land Grant Suit, Government Wins, 912
Materials, Increased Cost of, 1165
Ownership of Atlantic Steamship Lines, 416
Snow Sheds and Fire Protection System, 626*
Telegraph School, 1163
Track Inspection Results, 851
Transverse Fissure Problem—Accident near Iser, Texas, 623, 10864
"Wagonette" Lunch Service, 838*
Southern Pine Association: Study of Timber, 297†
Southern Railway:

Southern Railway: Apprentice Squad, 802 Financing Plan Abandoned, 383† Southern Railway (Continued):

Locomotives, Duplex, 267*
Passenger Service, Reductions in, 1159
"Tennessee Curve," 285
Southern Utah: Motor Car, McKeen, 148*
Spain: Locomotives for the Madrid, Zaragoza & Alicante, 785*

& Alicante, 785*
Spanish-American War and the Railways, 1394
Special Committee on National Defense (See
American Railway Association)
Special Committee on Relations of Railway Operation to Legislation:
Equipment Statistics, 1467†, 1492
State Laws, New, 767†, 791

Speed Recorder (See Fuel)
Spike (See Rail)
Sprinkler (See Fires)
Stadia Instrument, Young Hand, 369*
Standard Code (See Train Rules)
State Commissions:

State Commissions: California: Grade Crossing Survey, 340†, 349*

Fiscal Year Change, 111

Illinois: Passenger Rate Case, 73, 81†, 117, 348, 967, 1069, 1116, 1208, 1223† Reconsignment of Coal Cars, 114, 158

Reconsignment of Coal Cars, 114, 158
Iowa: Baggage Charges, 373
Legislation, New, 767†, 791, 1197
Loading, Heavier, Campaign, 1438
Members of, Salaries, etc., 685†, 687
Nebraska: Car Distribution Rules, 1069
New York:
Annual Report of First District, 116
Annual Report of Second District, 72,

253†
Texas: Shreveport Rate Case, 222
Utah: Public Utilities Act, 911
State Commission Rulings:

Illinois: Five Per Cent Rate Case, 719, 757, 802

757, 802
Louisiana:
List of Cars in Freight Service, 759
Texas & Pacific Fined for Failure to
Comply with Signaling Order, 288
Missouri: Rate Increases, 757
New Mexico: Interstate Freight Rates, 1500

New York:
Passenger Fare Increases, L. I., 719
Security Issues, 253†
Pennsylvania: Standard Crossing Signs,

961
Virginia: Tidewater & Western's Difficulties, 1210, 1257
Wisconsin: Freight Rate Revision, 199
State Regulation (See State Commissions; also Government Regulation)

Station:

Cincinnati's Project, 327

Cincinnati's Project, 327

Delaware, Lackawanna & Western at Buffalo, 227*

Design, Curbing Extravagant, 1129†

Macon Union Passenger Facilities, 693*

Passenger, Standard, St. L. & S. F., 191*

Pennsylvania at Johnstown, Pa., 1016*

St. Paul Union, 1041*

st. Paul Union, 1041*
tistics:
Analysis and Costs, 297†
Average Car Capacity and Average Load per Loaded Car, 1904-1916, 1283*
Block Signals, Jan. 1, 1917, 1492
Bureau of Railway Economics Returns for 1916, 253†, 262
Canadian Railway Results for 1916, 887
Car Loading, So. Pacific, 33
Car Supply and Car Mileage, 1907 to 1916, 127†, 145*
Cars and Locomotives Ordered in 1916, 28
Cars and Locomotives Ordered in 1917, 297†, 1031†, 1463*
Coal Shipments to Chicago, 1175†
Equipment Exports for Eight Months, 1092
Equipment Exports for Eight Months, 1092
Grain and Flour Shipments from Chicago, 1131†
I. C. C. Figures of Earnings and Taxes, 1891-1916, 83†, 213†
I. C. C. Work, Increase in, 1488
Monthly Analysis of Operating Expenses, 21, 215*
Poles Purchased in 1915, 716
Rail Production in 1916, 936, 1138, 1360
Rate Increases Throughout the World, 1110
Taxation Figures, 1897-1916, 83†, 213†
Traick Materials Produced in 1916, 1158
Trainmen's Earnings in 1916, 454
p (See Car)
Ilwell, L. B.: Erie All-Steel Coaches, 1472* Statistics:

Trainmen's Earnings in 1916, 454

Step (See Car)

Stillwell, L. B.: Erie All-Steel Coaches, 1472*

Stock (See Finance)

Strainer (See Locomotive)

Street Stoker and Grate Area Limitations, 196

Strike (See Employee)

Sub-Committee (See Committee)

Sunset Central Lines: Loading Lumber, Record for, 458*

Superintendent (See Officer)
Supplies (See Equipment and Supplies; also
Office)

Supply, Railway, Industry in the War, 1463* Swab Holder, Paxton-Mitchell, 738* Sweden: Accident at Soderhamn, 370

T

Tackle (See Hoisting and Conveying)
Tanana Valley Railroad: Purchase by Government, 1205
Tax (See Finance; also Legal Decisions)
Telegraph (See also Association of Railway
Telegraph Superintendents)

Telegraph:
Dempsey Codes Adopted by National Defense Committee, 1111
Southern Pacific's School, 1163
Western Union on the Pennsylvania, 1468†
Telephone and Telegraph Mobilized for War Purposes, 1419
Terminal (See Yards and Terminals)
Terminal (See Yards and Terminals)
Terminal Railroad Association: Controversy with City of St. Louis Settled, 1131†
Test Department's Value—Locomotives on the Pennsylvania, 339†, 612†, 635*, 1176†, 1187*
Texas: "Full Crew" Bill. 1029‡ 1050

Texas: "Full Crew" Bill, 1029\(\frac{1}{7}\), 1050
Texas Midland: Valuation Hearings Before the
I. C. C., 171\(\frac{1}{7}\), 193, 212\(\frac{1}{7}\), 225, 285, 412,
451, 644, 747
Third Reserve Engineers Organized, 1196\(\frac{1}{7}\), 1278
Thomas, E. B., 352\(\frac{1}{7}\) Ticket:

Ticket:
Multi-Route Interline; C. & N. W., 1148*
Pullman Reservations, 1469†
Tidewater & Western:
Dissolution Request,
1210, 1257

Ties and Timber (See American Wood Preservers' Association):
Cars. Tie: A. T. & S. Fe, 749*
Creosote Treatment of Douglas Fir Ties by Perforations, 783*
Crib Retaining Walls; C. R. I. & P., 735*
Grading of Lumber; A. R. E. A. Report, 660†, 667*
Lumber Conference Committee, 466
Lumber Loading Record, 458*, 719, 1106*
Lumber, Resawing: C. B. & Q., 946*
Northern White Cedar, Data on, 608*
Poles Purchased in 1915, 716
Preservation Department; B. & O., 1489
Report of A. R. E. Association, 563†, 574*
Study of Timber, Co-operative, 297†
Timber Protection Methods; A. T. & S. Fe, 7*
Wood Preservation: Report of A. R. E. A

7*
Wood Preservation; Report of A. R. E. A. on, 671*
Tile (See Concrete)
Toledo Transportation Club: Problems, W. M. Daniels on, 19
Tonnage (See Train Loading)
Tools (See Equipment and Supplies)
Tornadoes Damage I. C. Property, 1164
Track:

Tornadoes Damage I. C. Property, 1164
Track:
Connector. Coleman Bond-Wire, 1493*
Drilling Screw Spikes Pneumatically, 748*
Frog, Manganese. Design of, 1192*
Grinder, Swing Frame, 559*
Inspection, Annual; So. Pacific, 851
Labor Shortage, 384†, 1314*
Materials Produced in 1916, 1138
Report of A. R. E. Association, 566*
Scale, Plate Fulcrum; Pennsylvania, 395*
Snow Cleared by Steam; C. B. & Q., 286
Stresses, Report of A. R. E. A. on, 550*
Tests of Insulation Fibre, 314
Weed Killing Methods, 557*, 679*
Track Capacity Increased by Signaling, 1423*
Track Elevation at Johnstown; Pennsylvania, 1013*
Track Csee Truck)
Traffic (See also National Industrial Traffic

Track Elevation at Johnstown; Pennsylvania, 1013*

Tractor (See Truck)

Traffic (See also National Industrial Traffic League; also National Defense; also War):

Chicago Electrification Problem, 86‡
Coal Shipments to Chicago, 1175†
Co-operation Between the M. K. & T. and the St. L.-S. F., 373, 383†
Equipment to Move an Army, 1003
Grain and Flour Shipments from Chicago, 1131†, 1175†
Handling Troons and Supplies on Canadian Railways, 1302
Irauguration Day at Washington, 393
Military, Transportation of, 1327*, 1334
Passenger Traffic, Increasing, 26
Terminal Operation in War Time, 1420*
Traffic Club of Chicago: Election of Officers, 757

Traffic Club of Jacksonville: Regulation Needed, A. 197

Traffic Club of Pittsburgh: Election of Officers, 1499
Train Density (See Track Capacity)
Train Density (See Track Capacity)
Train Density (See Track Capacity)
Train Officers, 1111
Form G3, Usefulness of, 3†, 5‡, 86‡
Orders, "19" and "31", 1425
Private Office for the Despatcher, 256‡
Savings by the Despatcher, 442, 1471‡
Stydy of Language Problems—Some Needed Forms, 1192
Yard Limit Boards Needed, 988‡
Train Handling:
Brake Usage, 1006, 1007
Breaks-In-Two, Reducing: A. T. & S. Fe

Yard Limit in Handling: Train Handling:
Brake Usage, 1006, 1007
Breaks-In-Two, Reducing; A. T. & S. Fe, 900 Train Line Maintenance, 319

Train Loading:
Canadian Railway Results for 1916, 887.
Contest on Increasing the Train Load, 171†, 299†, 611†, 1401*
Distribution of Loads in Trains, 47‡, 300‡*, 615‡, 731‡*, 932‡
M. K. & T. Performance Sheets, 401
Tonnage Affected by Operating Conditions, 848, 945
Train Operation (See also Operating Efficiency):

Train Operation (See Employee—Wages)
Train Operation (See also Operating Efficiency):
Automatic Signals and Freight Train Time;
No. Pacific, 1424
Motor Car Rights; W. M., 640
Schedules for Extra Trains, 3†, 5‡
Train Order (See Train Despatching)
Train Resistance:
Tests by the University of Illinois, 407*
Wheel's Thrust Against Rail on Curves, 300‡*, 615‡, 731‡*, 932‡
Train Robberies: Freight Containers Faulty, 613†, 773‡
Train Roberies: Freight Containers Faulty, 613†, 773‡
Train Roberies: Freight Containers Faulty, 773‡
Train Stop (See Signaling—Automatic)
Trains, Ambulance, 1439*
Trains, Armored, in Italy's Navy, 939*, 1374*
Trains, Armored, in Italy's Navy, 939*, 1374*
Transit, Warren-Knight Sterling, 559*
Transportation of Military Traffic, 1327*, 1334
Transportation Club of Detroit: Election of Officers, 1208
Transverse Fissures (See Rail)
Traveling Engineers' Association: Indorsement of Proprietary Devices, 611†, 614
Travers, Marie, Miss, a "Flagwoman" on the B. & O. Southwestern, 1062*
Trespassing (See Accident)
Truck:
Articulated Tender, 744*

Truck:
Articulated Tender, 744*
Resistance on Curves, 300;*, 615;, 731;,

Resistance on Curves, cook, 1932†
Scales for Automobiles; B. & O., 1239*
Tractors and Trailers for Handling L. C.
L. Freight, 792
Tuco Products Corporation Organized, 1504*

Tunnel:
Canadian Pacific at Rogers Pass, 273*
Hudson River Wagon Road, 852, 1250

U

Uniforms for Women Car Cleaners, 1085‡*
Union Pacific:
Annual Report, 4†*, 1082†*
Bridge Reconstructed at Omaha, 95*
Union Switch & Signal Company:
Crossing Bell, 560
Fire at Swissvale, Pa., 294, 327
"Flagman, Automatic," Three-Aspect, 65*
Interlocking in the Dallas Terminal, 279*
Merger with the Westinghouse Air Brake
Company, 123
Movement, New, and Other Developments, 512*
United States Circus Corporations. Travel by

United States Circus Corporation: Travel by Motor Trucks, 281 Motor Trucks, 281
United States Department of Agriculture: Poles
Purchased in 1915, 716
United States Steel Corporation:
Annual Report, 656
Earnings, 208
University of Illinois: Train Resistance Tests,
407*

University of Pennsylvania: School for Women, 1495 Unloader (See Hoisting and Conveying) Utility Bureau: Rate Advances, Protest Against, 852

Valuation: nation:
Advisory Board, 169†
Atlanta, Birmingham & Atlantic, 171†, 193, 212†, 225, 645, 747
Continuation Inadvisable, 796, 986†, 1417
Depreciation and Land Values, 225, 712, 746, 747
Description Testimony of W. B. Storey Depreciation and Land Values, 225, 712, 746, 747

Depreciation—Testimony of W. B. Storey and D. F. Crawford, 1406

Elgin, Joliet & Eastern, 323, 714

Hulme, T. W. on the Six Tentative Valuations, 323

I. C. C. Hearings on Carriers' Protests, 139, 154, 171†, 193, 212†, 225, 285, 412, 553, 563, 606, 644, 711, 745

Kansas City Southern, 139, 254†, 745

Mechanical Valuation Committee, 351

New Orleans, Texas & Mexico, 154, 254†

Prices, Unit, Hearing on, 451

Progress, 68, 961

Reproduction Cost and Tentative Valuations, 254†.

Rights of the Carriers, 1133‡

Texas Midland, 171†, 193, 212†, 225, 285, 412, 451, 644, 747

Winston-Salem Southbound, 110, 323

Verdun (See France)

Virginian Railway: Locomotive, Triplex Compound, 141*

[Illustrated articles are indicated thus *; Editorials thus †; Letters to Editor thus ‡.]

W

W. & L. E. Gurley: Rail Recorder, 609* Wabash: Mattress of Wire Mesh for Bank Pro-tection, 321*
Wagonette (See Car)

Walls, Crib Retaining; C. R. I. & P., 735*
Walter Concrete Machinery Company: Roofing
Tile, 562*

War, The (See also National Defense):
Ambulance Trains, 1439*
American Mission to France, 1275, 1428*
American Railways Since the Civil War, American Mission to France, 1275, 1428*
American Railways Since the Civil War, 1387*
American Railways' War Service, 981†, 997, 1269†, 1422
America's Army of Railway Protectors, 943*
Associations, Railway, Service of, 1176†
Bath Trains, 1306
Bridge Renewals, 1434*
British Railway Operation, 872†, 901, 1271*
Camps, Location of, 1339*
Canadian Railways' Part, 1299*
Car Conservation a Patriotic Duty, 1175†
Car Shortage (See Car Service)
Clearance Records Essential to Military Operations, 1320
Coal Supply, The, 932‡, 1295*
Construction Activities, 1309*, 1468†
Conventions, Postponement of, 871†, 1208
Employees on the Baltimore & Ohio, 1306
Employees Who Enlist, 1301, 1348, 1411
Equipment Built in America and Canada for European Countries, 1463*
European Wage Demands and Freight Rate Increases, 265
European Railway Situation, 1453
Europe, Traveling in, 231
Europe's Transportation Muddle, 189
Finance, Effect on, 1431
Food Problem, 1376*, 1467†
France, Mission to, 1275, 1428*
Front, Railways Behind the, 1449*
Fuel Situation, The, 1295*
Governments and the Railways, 1030†
Immigration After the War, 739
Industrial and Railway Efficiency, 1341*
Influence of Railways on Warfare, 1332*
Italy's Armored Trains, 939*, 1374*
Italy's Armored Trains, 939*, 1374*
Italy's Railroad Organization, 57*
Labor, American and British, 1367*
Labor, Problem, 1314*, 1341
Liberty Loan, 1058, 1079†, 1094, 1149, 1197, 1206, 1249, 1433
Light Railways, 1364*
Loans, European War, Advertising, 816†, 835*
I ocomotive Built in America, 1456*, 1463*
Locomotive Maintenance, 1343*

I ocomotives Built in America, 1456*, 1463* Locomotive Maintenance, 1343*

War, The (Continued):

War, The (Continued):
Locomotives, Small, at the Front, 1383*
Maintenance of Way Labor Problem, 1314*
Mechanical Men, Enlistment of, 1411
Passenger Service, Reductions in, 926†, 982†, 1092, 1159, 1163, 1185, 1255, 1500
Preparedness, Railroad, 1412*
Priority Bill, 1312, 1486
Protecting Railroad Property, 328, 940, 943*, 1445*
Protection of European Railways, 715
Regiments, American Engineering, 871†, 895, 1004, 1093, 1099, 1138, 1196*, 1274*
Regulation, Effect of, 1415*
Reports, Eliminating Useless, 1326
Russia, American Railway Commission to, 908, 1012, 1018, 1251, 1448*, 1490
Signal Situation, 1423*
Taxation Bill, 1003, 1061, 1098
Telephone and Telegraph Mobilized, 1419
Terminal Operation, 1420*
Traffic, Military, Transportation of, 1327*
Trespassing Danger, 816†, 1130†
Verdun, Attack Upon, 1450*
Willard, Daniel, on, 1011, 1307*
Women Employees, 963, 1062*, 1066*, 10851*, 1163, 1303*, 1407*, 1457, 1496
Y. M. C. A.'s Service, 1280*
Warehouse (See Bridges and Buildings)
Warren-Knight Company: Transit, Sterling, 559*
Washington Torrespondence (See also separate headings), 824
Washington Traffic Club: Pressing Railroad
Problems, 285
Waste (See Economic Practices)
Waterbury Battery Company: Primary Battery
Cells, 511
Waterloo Cement Machinery Corporation: Mixer, 562*
Water Service:
Boiler Troubles Investigated, 359*
Pump, Air Displacement, 679*
Pumping Head, Electrically Driven, 561*
Report of A. R. E. Association, 529*
Sales of City Water to Railroads, 740
Sprinklers, Automatic, Pennsylvania, 183*
Supply and Cost, 740, 903
Waybill (See Freight)
Webb, Jean F., Jr.: Automatic Train Stop, 789*
Weber Subterranean Pump Company: Air Displacement Pump, 679*
Veed (See Agriculture)
Weighing:
Grain Scales, 1129†, 1155
Scale, Plate Fulcrum Track; Pennsylvania, 395*
Prest-O-Lite Gas for Lead, 680*
Western Maryland:
Accident at Knobmount, W. Va., 3†

Western Maryland: Accident at Knobmount, W. Va., 3†

Western Maryland (Continued):

Western Maryland (Continued):
Annual Report, 1177†*, 1214
Motor Car Operation, 640
Western Pacific:
Car Loading Efficiency, 773‡
Train Despatching—Rule 93, 86‡
Western Union Telegraph Company:
Contract with the Baltimore & Ohio, 326
Eight-Hour Day for Telegraphers, 718
Pennsylvania, Service on the, 1468†
Westinghouse Air Brake Company: Merger with
the Union Switch & Signal Company, 123
Westinghouse, Church, Kerr & Co.: C. B. & Q.
Shops at West Burlington, 345*
Wharton Steel Company: Sale to J. Leonard
Replogle, 123
Wheel:

Whatton Steel Company: Safe to J. Leonard Replogle, 123
Wheel:
Chilled Iron Car, 278
Thrust Against Rail on Curves, 300‡*, 615‡, 731‡*
Whitman, Paul P.: Investigation of Transportation Facilities Abroad, 411
Willard, Daniel: Railways in the War, 1011, 1307
Williams, F. B., Cypress Company: Lumber Loading Record, 458, 719
Willys-Overland Company: Unloading Automobiles, 1157*
Wine Railway Appliance Company:
Roller Bearing, Self-Centering, 196*
Shutter, Car Ventilating, 190*
Winston-Salem Southbound Railway: Valuation, Tentative, 110, 323
Wire:

Tentative, 110, 525
Wire:
Connector, Coleman Bond, 1493*
Crossings, 881
Wollner, William S.: Railway Service in War, 1422
Women (See Employee)

Yards and Terminals:

Billing at Large Terminals, 49
Chicago Terminal Electrification Plans, 86‡, Chicago Terminal Electrification Plans, 86‡, 126†
D. L. & W. at Buffalo, 227*
Dock (See Piers)
Elevators, Government, at Seaports, 1087‡
Engine Terminal, The, 1346
Macon Union Terminal, 693*
New York Central in New York City, 1205
Operation in War Time, 1420*
Relocating Terminals to Shorten Engine
Districts, 982†
Report of A. R. E. A. on, 583*, 792
Scrap Yard, Central, 25
Warehouse in Cleveland, 1482*
Yard Limit Boards and the Flagman, 988‡
Yard Service and Terminal Service, 42†
Young, R. C.: Range Finder, 369*
Y. M. C. A.:
Sugimoto, Y., on, 17
War. Time Activities, 1290* Sugimoto, Y., on, 17 War Time Activities, 1280*

NEW BOOKS

American Railway Association; Proceedings;
Volume VII, 1912 to 1915, 173
Construction and Maintenance Costs, 299
Debaters' Handbook on Government Ownership
of Railroads, 686
Design of Railway Location, The, 987
Fuel Association Proceedings, 214
General Foremen's Association Proceedings, 214
Government Partnership in Railroads, 1179
Handbook on Wood Preservation, 84
How the World Makes Its Living, 85
How to Protect Your Factory from Fire, 389
Instructions to Locating Engineers, 389
Law of Interstate Commerce and Its Federal
Regulation, The. (Third edition), 1225
List of Publications Pertaining to Government
Ownership of Railways, 729

Master Blacksmiths' Proceedings, 614
Municipal Ownership Fails in U. S. A., 1225
Pipe and the Public Welfare, 256
Poor's Manual of Railroads, 1917, 773
Preservation of Structural Timber, The, 46
Principles of Railroad Transportation, 84
Procedure Before the Interstate Commerce Commission, and Grounds of Proof in Rate Cases, 214
Proceedings of the American Railway Bridge and Building Association, 987
Proceedings of the American Society for Testing Materials, 299
Proceedings of the Railway Storekeepers' Association, 436
Proceedings of the Traveling Engineers' Association, 614

Railroad Problem, The, 1132
Railway Estimates, 1470
Railway Freight Connections and Car Interchange Points, 342
Rate Extension Tables, 772
Statistics of Common Carriers, 1916; Preliminary Abstract, 299
Statistics of Railways, 1905-1915, 173
Steel Railway Bridges, 84
Stresses in Structural Steel Angles, 1470
Tables for Computing the Compensation of Railway Employees Under the Eight-Hour Law, 1179
Tool Foremen's Association Proceedings, 173 Tool Foremen's Association Proceedings, 173 Wharves and Piers, 877 Workmen's Compensation Law of the United States and Foreign Countries, 823

ELECTIONS AND APPOINTMENTS

[* Indicates photograph and sketch. ‡ Indicates sketch only.]

Abbott, Hunley, 1170
Abernethy, D. S., 972
Abington, W. T., 1073
Acers, R. C., 1504
Ackerman, A. H., 380, 764
Adams, C. McD., 1218
Adams, T. T., 858
Agnew, D. W., 805
Aigeltinger, Arthur, 77
Aiken, E. N., 164, 291*
Akridge, T. B., 1172
Alexander, Walter, 858
Alford, L. P., 422, 860
Alfred, Frank H., 840*, 857
Allen, B. L., 653, 805\$

Allen, I. E., 1073
Allen, N. C., 291
Allen, P. C., 75
Allen, Stuart, A., 377, 420*
Allison, Smith E., 337
Alquist, P., 163
Anderson, H. F., 75
Anderson, Ir. E., 335
Anderson, J. E., 335
Anderson, J. E., 345
Andrews, W. H., 249
Andrews, W. H., 249
Andrews, W. S., 121, 163
Ansley, H. C., 203
Archer, P. C., 245
Arms, Robert L., 472
Armstrong, A. G., 654

Armstrong, H. T., 77
Armstrong, R. W., 913
Armstrong, S. E., 470
Arn, W. G., 1025, 1266
Arnold, Brent, Jr., 335
Arnold, C. R., 760
Ashby, Edward B., 973*
Astley, Harry E., 1127, 1509‡
Atkins, E. G., 334, 377
Atkinson, A. R., 654, 1073*, 1510
Atwill, William, 761
Austin, Frank S., 762, 807‡
Ayers, L. C., 1508 Baals, D. S., 857, 858, 915 Bachellor, R. M., 75, 120*

Backes, William J., 1126
Backus, Frederick F.. 1125
Bacon, J. L., 656‡
Bacon, S. D., 120
Baetz, H. F., 1506*
Bailey, F. W., 36
Bailey, William M., 249
Baird, Milton A., 915
Baisinger, W. C., 915, 1173
Baker, Charles W., 975
Baker, H. F., 760
Baker, Horace, 119
Baldwin, Arthur J., 381
Baldwin, L. W., 294
Baldwin, L. W., 294
Baldwin, William A., 914
Ball, Russell, 378

Banker, E. H., 290
Bannon, J. B., 164
Bardgett, E. R., 120, 205
Bardo, C. L., 1126
Bardwell, R. C., 471
Barhite, John A., 332
Barnes, F. D., 1509
Barnes, O. F., 1025
Barnett, Otto R., 764, 860
Barnhart, R. E., 973
Barnum, Morgan K., 203*, 205
Barnum, William M., 380
Barry, John G., 975*
Bartlett, A. L., 1174
Barton, D. E., 915
Bashford, Edward E., 202
Bast, P. E., 806
Bates, W. W., 1217
Bath, J. M., 913
Batt, W. L., 166
Bauchen, F. A., 761
Bauman, E. G., 206
Baumandner, J. A., 1216
Baxter, Ernest, 974, 1128*
Beal, F. L., 1024, 1127‡
Beath, C. G., 290
Bebb, J. E., 36
Beckler, W. A., 164, 247*
Beetel, B. T., 1026
Beecham, W. E., 913
Bedford, A. C., 249
Begien, Ralph N., 722
Behnke, C. B., 205
Behring, F. H., 164
Bell, A. D., 1127, 1218*
Bell, C. E., 164
Bell, C. E., 164
Bell, C. E., 164
Bell, C. E., 164
Bennett, F. G., 74
Bennett, James C., 1506
Bennett, R. G., 378
Bennett, W. H., 1024
Bennett, F. G., 74
Bennett, James A., 1025
Bennett, W. H., 973
Bennett, W. H., 1024
Berning, F. M., 377, 419
Benson, Roy, 37
Bennett, W. J., 1024
Bergield, A. L., 1508
Berlingett, James, 419
Berson, Roy, 37
Bennett, W. J., 1024
Bergeld, A. L., 1508
Berlingett, James, 419
Berson, Roy, 37
Bennett, W. J., 1024
Bergeld, A. L., 1508
Berlingett, James, 419
Benson, Roy, 37
Bennett, W. J., 1024
Bergeld, A. L., 1508
Berlingett, James, 419
Bernhardt, J. E., 1219
Berty, George W., 761
Best, J. A., 421
Betson, Claude, 915
Bettendorf, J. W., 1504
Betterdorf, J. W., 1504
Betterdorf, J. W., 1504
Betterdorf, J. W., 1504
Berdord, R. D., 123
Blanchard, F. C., 860
Blum, Bernard, 205, 973
Blut, J. J., 724
Browe, John P., 761
Bowe, C. H., 1126
Bower, C., 245
Boyer, E. S., 250
Boyer, F. S., 250
Boyer, F. P., 1265
Brady, Philip, 973
Brardy, Ph., 197
Brardy

Brennan, E. J., 1074
Brereton, J. S., 469
Bridge, F., 915
Brierly, E. J., 722
Briggs, E. S., 1024
Brigham, D. S., 1072
Brigham, H. H., 805
Brinckerhoff, H. G., 166
Briney, Mark R., 472
Brinkman, J. H., 1510
Brinser, C. E., 806
Eristow, George, 164
Brittain, J. S., 291
Bromley, A. H. Jr., 209
Brooking, J. H., 1220
Brooknewer, O. F., 119
Brooks, F. S., 291
Brooks, W. E., 1217
Broome, S. P., 808
Broughton, M. H., 1125
Brown, A. A., 761
Brown, A. A., 761
Brown, B. G., 246, 420¢
Brown, Charles A., 74
Brown, C. B., 1265
Brown, C. W., 419, 4703
Brown, E. L., 652, 805
Brown, E. N., 839*, 857
Brown, F. W., 163
Brown, F. W., 163
Brown, J. H., 246
Brown, J. H., 246
Brown, J. H., 246
Brown, L. D., 763
Brown, L. D., 763
Brown, L. D., 763
Brown, L. L., 1217
Browne, Oliver G., 203
Brown, M. H., 857
Brown, C. L., 1217
Browne, Oliver G., 203
Browning, B. W., 36, 119\$
Bruce, L. V., 75
Brule, W. A., 1024
Bruner, F. J., 760
Brunswick, Walter, 1120
Bryan, M. C., 1127
Bryning, H. B., 1218
Buchannon, W. F., 74, 203
Buckbee, E. J., 471
Buddin, G. R., 163
Buell, B. John, 917
Buford, C. H., 761, 805
Burrs, J. E., 764
Burres, J. E., 764
Burress, S. E., 291
Burgess, S. E., 291
Burgert, Garrett, 1505
Burns, J. L., 1264
Burr, C. E., 1125
Burns, J. R., 860
Burrows, John, 11, 419
Burry, V. J., 975
Burton, J. R., 860
Burrows, John, 11, 419
Burry, V. J., 975
Burton, J. R., 860
Burrows, John, 14, 419
Burry, V. J., 975
Burton, J. R., 860
Burrows, John, 14, 419
Burry, V. J., 975
Burton, J. R., 860
Burrow, J Butler, W. R., 75
Butler, W. W., 39

Caffey, W. H., 420
Cahill, R. E., 1509
Caldwell, E. J., 501‡, 656, 724*
Caldwell, George K., 164, 246‡
Caldwell, W. T., 163
Call, Norman, 972
Callahan, J. E., 913
Callahan, J. J., 1220
Campbell, Edward A., 761‡
Campbell, E. H., 653
Campbell, P., 1217
Campbell, P., 1217
Campbell, P. G., 1126
Campbell, P. G., 1126
Campbell, W. S., 805, 857*
Campbell, W. S., 805, 857*
Campbell, W. S., 805, 857*
Candler, C. L., 204
Cannon, J., 1217
Cantrell, S. T., 1509
Capps, O. B., 1505*
Card, Joseph B., 77
Carlander, Axe., 1027
Carlisle, James G., 164*, 1217
Carlton, A. E., 1264
Carlton, L. G., 1264
Carlton, L. G., 1264
Carrell, E. J., 1125
Carrero, F. E., 654
Carroll, J. H. Jr., 1510
Carroll, J. H. Jr., 1510
Carroll, Phil., 36
Carry, E. F., 764
Carse, John B., 1075
Carson, Cassius E., 1220
Cary, F. H., 164
Cary, Walter, 1506*
Case, D. M., 121, 205
Casey, M. B., 119, 377‡
Casey, T. P., 722
Cass, Louis Stephen, 653‡, 1216

Cassidy, D. E., 163
Castle, Charles C., 337, '423* Castle, C. C., 245, 335*
Caswell, C. H., 973
Cates, Isaac, 77
Caton, S. W., 1127
Chace, H. C., 204
Chamberlain, Harold B., 1504
Chamberlin, C. H., 973
Chapman, A. J., 118
Charles, R. S., 205, 722, 917
Charlton, J. H., 807
Chassel, Edward D., 73*
Cherry, W. Y., 654
Chesbrough, E. G., 246, 291
Childs, S. M., 1218
Chienna, R. N., 78
Chisholm, W. J., 1218
Chirtenden, A. D., 119
Church, J. E., 419
Clarr, R. S., 36
Claggett, F. D., 164, 291‡
Clarr, S., 36
Claggett, F. D., 164, 291‡
Clarry, F. E., 972, 1073*
Clarty, F. E., 972, 1073*
Clarty, F. E., 972, 1073*
Clark, F. T., 75
Clark, F. T., 75
Clark, F. W. 69
Clark, R. W. V. V., 1505
Clerk, G. H., 150*
Clarke, Walter, 74
Clarke, W. V. V., 1505
Cleege, C. H., 205
Clement, M. W., 1265, 1509*
Clifton, Randall, 164, 247‡
Cloud, A. D., 1504
Cluis, V. M., 470
Coapman, E. H., 118, 163, 203
Cobb, H. M., 204
Cochran, C. W., 378
Cogan, J., 1264
Coggin, Frank F., 764
Cohen, L. L., 207
Colbert, James T., 200
Collert, James T., 200
Collert, James T., 200
Collert, James T., 200
Collins, A. B., 291
Collins, F. S., 163
Collins, J. C., 337
Colton, Asa, 294
Connelly, J. W., 163
Connelly, J. W., 163
Connerton, M. J., 378
Conner, Alfred, 975
Cook, Charles S., 656
Cook, C. C., 654, 806
Cook, G. H., 420
Cook, R. E., 164
Cooke, George T., 764
Cooper, E. M., 74
Cooper, E. M., 74
Cooper, F. R., 1026
Cooper, G. A., 1026
Counningham, C. C., 807
Cunningham, C. C.

Curtis, W. J., 205 Cuyler, J. W., 722 Dakin, G. E., 1504
Dakin, M. A., 1504
Dakin, M. A., 1504
Dakin, Samuel, 1504
Dales, A. E., 722
Dalstrom, Oscar F., 654‡
Daly, Daniel, 204
Dancy, M. W., 858
Daniels, M. B., 857
Daniels, Winthrop M., 44, 55, 73, 144
Danley, W. L., 75
Darragh, J. L., 120
Darrow, W. W., 77
Davids, C. N., 1264
Davidson, A. I., 35
Davidson, A. J., 35
Davidson, A. J., 35
Davidson, A. M., 1173
Davidson, William, 974, 1074, 1128*
Davie, George F., 78
Davin, H. A., 858
Davis, Geo. F., 292
Davis, H. J., 205
Davis, Joseph, 166, 209‡
Davis, J. Soscar King, 917
Davis, M. L., 1128
Davis, M. E., 1128
Davis, Oscar King, 917
Davis, R. E., 1072
Dawson, R. F., 722
Deaner, C. F., 654
De Bernardi, Albert, 1508, 1509
De Butts, R. H., 291
Deetrick, J. W., 975
De Groodt, R. L., 1265
De More, G. A., 1219
Dempcy, Thomas E., 1021, 1071‡
Dennis, George A., 805
Dennis, Robert A., 973
Dennis, Robert A., 973
Dennis, Walt, 858*
Dennis, Nalt, 858*
Densiston, M. P., 653
De Sautelle, J. I., 1126
Devans, E. J., 764
Deveny, W. D., 205
Devol, G. C., 420, 470‡
Dewey, F. E., 1264
Devey, Luman R., 380
Dickson, John B., 914, 1125
Diehl, J. B., 857
Diehl, R. O., 858
Diemar, C. R., 722
Dill, S. W., 203
Dillon, E. P., 656
Dinan, A., 205
Dinan, D. W., 972, 973‡
Dinkey, A. C., 249
Doods, James H., 363, 119
Dodge, G. G., 163
Donaldson, Thomas C., 1074
Donal, J. S., 246
Dorenlan, Joseph F., 915
Donny, W. H., 858
Douglas, F. W., 378
Douglas, F. W., 653
Draw, H. H., 205
Drew, J. G., 1125
Driscoll, D. N., 1264
Droege, John A., 1126
Droughty, M. H., 420, 915
Douglas, F. W., 378
Doug Dyke, R. L., 1025

Earle, J. L., 1074

Easby, D. T., 807

Easley, F. J., 291, 334;

Eastman, W. R., 75

Faton, O. L., 1125, 1128

Eaves, G. W., 378

Eckert, W. F., 246

Eddy, W. J., 858

Edmunds, Edward J., 914

Edwards, F. C., 204

Edwards, J. P., 722

Eoly, C. A., 246

Fib, Charles H., 77

Fldund, K., J., 763

Flder, A. H., 1216

Flder, C. C., 335

Elliott, F. S., 377

ELECTIONS AND APPOINTMENTS—Continued

Elliott, Howard, 905
Elliott, H. S., 1025
Elliott, John H., 119‡
Elliott, L. B., 378
Ellis, F. E., 470
Ellis, G. M., 470
Ellis, G. M., 470
Ellis, G. M., 470
Elmer, James P., 163
Elly, N. D., 1027
Emery, I. S., 972, 1072‡
Emley, W. S., 1174
Emmert, J. C., 1276
Endsley, H. S., 294
Engle, C. W., 205
Ennis, J. B., 1170
Eppes, E. B., 761
Ericson, Lambert T., 724
Ermstrom, George L., 378
Ervin, C. E., 163
Evans, D. J., 1125, 1265‡
Evans, Walter H., 337
Everitt, George F., 419, 653‡
Ewing, Albert, 204, 334‡
Ewing, David L., 1172
Faherty, T. K., 36

Everitt, George F., 419, 553‡
Ewing, Albert, 204, 334‡
Ewing, David L., 1172

Faherty, T. K., 36
Fairbain, F. W., 291
Falck, F. M., 246, 857°
Farnsworth, Ellis, 858, 914
Farrell, James A., 917
Fatherson, Thomas W., 1220
Fay, C. S., 205, 247°
Feakins, G. W., 1218, 1264
Fegan, C. P., 805
Felton, H. C., 246
Felton, S. M., 1174, 1275° 1276‡
Fenno, H. W., 471
Fenton, Mark, 476, 654‡, 1510
Ferriday, R., 205
Field, William A., 122
Fields, John C., 290
Fincher, C. F., 913
Finegan, E. B., 246, 377°
Finley, James, 722
Finnell, H. W., 249
Fitz, W. S., 291
Fitzmaurice, R. D., 75, 119°, 1126
Fitzwaurice, R. D., 75, 119°, 1126
Fitzwilson, J. E., 164, 292‡
Flannery, J. Rogers, 294
Flippin, B. M., 914, 1024°
Flynn, E., 1217
Flynn, Frank H., 1172
Foley, J. J., 722
Folger, George H., 1023
Foote, R. C., 75
Ford, E., 118
Ford, J. B., 164, 420°
Ford, R. L., 75
Foreacre, W. N., 119
Foscue, A. W., 1074
Foster, E. G., 858
Foster, Leroy, 1220
Foster, U. T., 972
Foster, William H., 1127
Foster, E. G., 858
Foster, Leroy, 1220
Foster, U. T., 972
Foster, William H., 1173
Fritch, Louis C., 1218°
Froyd, E. A., 1074
Fulkerson, A. H., 291
Fuller, Oliver C., 860
Furman, T. H., 972
Gabriel, R. W., 1173
Gaffney, John F., Jr., 246, 377°
Gaffney, John F., Jr., 246, 377°

Fuller, Oliver C., 860
Furman, T. H., 972
Gabriel, R. W., 1173
Gaffney, John F., Jr., 246, 377*
Gage, S. T., 1125
Gagel, Edward, 1126
Gagnon, J. F., 15092
Gallaher, T. B., 1218
Galloway, A. K., 205
Gardner, J. W., 246
Gardner, L. R., 653
Garland, W. L., 1211
Garrett, George A., 36
Garrett, William A., 1128
Garrett, William A., 1128
Garrett, William A., 1128
Garrett, John H., 420
Garvey, J. B., 291
Gary, Elbert H., 763
Gatchell, W. H., 163, 290*
Gates, M. G., 807
Gatewood, E. C., 204, 1024
Gatlin, T. H., 163
Gaylord, T. P., 1506
George, R. E., 1024
George, W. A., 915
Gethins, J. F., 292
Gibson, Andrew, 205, 974
Gibson, H. R., 1173
Gilbert, G. W., 212
Gildroy, George J., 419
Gilfillan, C. R., 1127
Gill, Charles A., 205
Gillette, G. V., 419
Gillette, Sherman H., 1266
Gilmer, G. H., 805
Ginn, F. J., 119
Githens, J. N., 1218
Glancy, A. R., 725
Glasgow, Cassius L., 202

Glass, J. C., 163
Goeldner, E. A., 204
Goethals, George W., 294
Goforth, E. G., 419
Goings, C. E., 205
Gold, Egbert H., 764
Gold, Winthrop, 764
Goodwin, E. C., 164
Gordon, F. L., 380
Gordon, Robert L., 1120
Gorman, James E., 1487*
Gorsuch, C. B., 75
Goss, W. F. M., 295, 764
Gould, George J., 913
Govan, J. F., 1218
Gowing, I. P., 249
Graham, E. M., 36
Graham, George S., 915
Graham, James W., 1510*
Graham, J. B., 653
Graham, J. B., 653
Graham, R. H., 470
Gram, L. C., 163
Grandy, A. L., 1023
Grant, J. H., 75
Graves, L. C., 915
Graves, Ralph E., 1504
Gray, Budd D., 1027
Gray, Charles N., 120
Gray, G. H., 118, 290*. 335
Gray, H. J., 1024
Greave, George, 1216
Green, F. W., 1128
Green, H. M., 294
Green, Lincoln, 118, 203*
Griffin, F. R., 36
Griffin, F. R., 36
Griffin, F. R., 36
Griffin, F. R., 36
Griffin, T. R., 163
Griffin, S. N., 249
Grigg, Frank N., 472, 764*
Grimshaw, H. B., 1508
Grubbs, T. S., 123
Guild, Lawrence V., 1023
Gumpper, H. D., 122
Guppy, B. W., 1220
Gurley, F. G., 419
Gutelius, F. P., 1072, 1172, 1217*
Haberlaw, William E., 1220
Hackenberg, J. O., 807
Hacklenberg, J. O., 807
Hacklenberg, J. O., 807
Hacklenberg, J. O., 807

Haberlaw, William E., 1220
Hackenberg, J. O., 807
Hagelberger, Victor H., 1220
Hainen, J., 163
Hait, F. N., 973
Halberg, Otto Emanuel, 913‡
Haldeman, A. L., 1023, 1264
Hale, O. R., 248‡
Hale, Samuel, 78
Hall, H. C., 628*
Hall, H. M., 761
Hall, H. C., 628*
Hall, H. M., 761
Hall, James, 761, 915
Hall, W. G., 1024
Hall, W. W., 1504
Hallett, Edward M., 122
Halliday, J. O., 1126
Hallety, W. W., 336
Hambly, T., 1024, 1073
Hamilton, T. B., 74, 118‡
Hamlin, E. P., 1265
Hammer, B. H., 1508
Hancock, G. N., 913
Hand, G. T., 915, 974*
Hanna, J. H., 1173
Hansen, J. M., 295
Hansen, J. M., 295
Hansen, J. M., 295
Harris, L. J., 74
Hardy, W. G., 1218
Harper, G. B., 470, 1510
Harrell, H. B., 1073
Harrison, F. F., 764
Harris, C. L., 805
Harris, E. J., 1024, 1073
Harris, J. H., 913
Harris, J. H., 913
Harrison, Fairfax, 118, 203
Harrison, H. L., 294
Harrison, J. P., 974
Harsh, H. H., 806
Hartmann, W. F., 380
Harvey, Eugene, 290
Harvey, W. V., 118
Hassman, L. E., 724
Hatch, F. T., 205
Hayden, Bert, 1266†
Hayden, G. W., 1126
Hayes, Carlos A., 1217‡, 1265
Hayes, U. M., 722, 972‡

Haywood, William, 761
Hazelhurst, A., 294
Healy, J. D., 164
Hearn, H. B., 118
Heath, R. F., 972
Hebard, W. F., 122
Heberd, E. M., 857
Hegeman, B. A., Jr., 337, 423*
Hegeman, Harold A., 337, 423*
Hellen, Joseph, 722, 806*
Helm, Frank, 335
Hellen, Joseph, 722
Helm, Frank, 335
Helstrom, M., 204
Hennch. C., 915
Henderson, W. T., 204
Henry, J. M., 805
Herbert, G. B., 334
Herman, B., 163
Herr, E. M., 764, 1506
Herr, F. M., 764, 1506
Herr, F. M., 764, 1506
Herr, E. M., 764, 1506
Herr, P. M., 1170
Hervey, Charles S., 332
Heureman, W., 335
Hevener, Paul, 1174
Hickey, D. W., 119
Hicks, I. C., 654, 761
Higgins, Joseph A., 1509
Higgins, Samuel, 764
Hilland, F. S., 207, 294
Hillar, Frank, 36
Hillman, Edward D., 337, 423*
Hilliker, Hanson V., 857, 914‡
Hilliker, Hanson V., 857, 914‡
Hilliker, Hanson V., 857, 914‡
Hilliker, B. S., 1510
Hinc, Charles, 1174
Hiner, W. J., 1220
Hines, B. F., 205
Hite, H. C., 913
Hobbs, F. S., 1127
Hobbs, H. L., 1264
Hobbs, Ora H., 74
Hobson, E. P., 39
Hodgdon, William, 36*
Hodges, George, 845*
Hodkins, L. C., 805
Hoffman, E. W., 1125
Hoffman, H. A., 336
Hoffstat, F. H., 295
Hodlands, F. S., 1266
Hollands, F. S., 120
Holland, H. H., 1377, 805
Humbery, W. H., 337
Holland, H. H., 1377, 805
Humbery, W.

Hyde, C. W., 335 Ingalls, A. S., 334, 3772 Inglis, William W., 376 Ingram, George F., 858 Irwin, John, 805 Irwin, Robert, 913 Isbester, George C., 1504

Jackson, J. L., 1170 Jacobus, G. H., 1265 Jackel, W. M., 722 Jameson, C. K., 74 Jamison, T. E., 75, 291 Jeffers, W. M., 1508 Jeffery, Edward T., 66*
Jenkins, Jenks B., 1128
Jennings, R. D., 335, 377
Jensen, Frank, 1127, 1172‡
Jessen, Leo, 913
Jewitt, C. C., 378
Johnson, J. E., 805, 915
Johnson, Ben, 1073
Johnson, Herbert W., 35
Johnson, J. E., 419, 858, 915
Johnson, J. E., 419, 858, 915
Johnson, J. E., 1217
Johnson, William, 1217
Johnston, C. E., 291, 334*, 420
Johnston, William, 1217
Johnston, Walter H., 1220
Johnstone, J. G., 973
Jonah, F. G., 1220
Jones, B. M., 378
Jones, Clarence, 806
Jones, F. H., 1120
Jones, Grace E., 245
Jones, John R., 1217
Jones, J. A., 163
Jones, Larz A., 118
Jones, L. B., 163
Jones, L. M., 204
Jones, Melodia B., Mrs., 245
Jones, N. W., 246
Jones, W. G., 972
Jones, Warren H., 1506
Jordan, J. J., 163
Joyce, M. M., 1172, 1264‡
Kachelmacher, N. L. C., 123

Kachelmacher, N. L. C., 123
Kagay, D. M., 77
Kantmann, A. G., 118
Karibo, J. J., 471
Kavanaugh, C. J., 290, 419
Kearns, S. J., 334
Keating, P. F., 1217
Keeley, W. L., 75
Kegler, W. C., 378
Keiser, A. A., 202
Kelker, J. W., 763, 808*
Kelleher, G. C., 164, 205
Kelleher, G. C., 164, 205
Kelleher, G. L., 35
Kellogg, D. P., 722, 806*
Kelleher, G. L., 35
Kellogg, W. L., 248
Kellum, E. B. A., 1218
Kelly, J. W., 120
Kelly, W. W., 120
Kelly, W. W., 1127
Kelsey, F. D., 377
Kelso, C., 292
Kemper, E. H., 203
Kemper, William T., 1023
Kendall, Warren C., 35, 205‡, 972
Kenly, Ritchie, G., 1126*
Kennan, E. T., 74, 163
Kennedy, F. R., 805
Kennedy, F. R., 805
Kennedy, Grove C., 1220
Kennedy, M. J., 913
Kennedy, W. W., 378
Kennedy, W. M., 245
Kennedy, W. W., 378
Kennedy, W. M., 245
Kennedy, W. M., 245
Kennedy, W. W., 578
Kennedy, W. J., 510
Kennedy, W. W., 578
Kennedy, W. J., 510
Kennedy, W. W., 578
Kennedy, W. J., 510
Kennedy, J., 510
Kenn

Kyle, R. P., 377

Lacy, L. D., 805

Laird, Samuel, 336

Lakin, F. D., 1025

Lamb, O. S., 653

Lamphere, F. E., 1510

Lancaster, J. L., 913

Landry, H. D., 1073, 1127‡

Lane, Harry A., 722, 761*

Lang, Henry, 250

Langham, E., 420

Lank, W. J., 1024

Lantry, T. H., 1264, 1265

Lantz, P. H., 1509

Lass, Edward, 860

Lassiter, Columbus K., 166, 208‡

Latrop, C. L., 972

Latrobe, G., 1265

Laughton, H. H., 163, 419‡
Lautz, H. B., 204
Lavarack, W. W., 336
La Vine, H. H., 1218
Lawton, A. L., Jr., 1128
Lawton, R. M., 1174
Layfield, E. N., 764‡
Leahy, W. J., 760, 1128
Leamy, M. F., 36
Leary, John A., 1265
Leatherland, W. I., 163
Le Baron, R. W., 1128
Lee, Elisha, 722, 760*, 1265
Lee, J. Moultrie, 760
Lee, Robert E., 1217
Leech, H. A., 973
Legg, W. M., 913
Leighton, William, 724
Leighty, C. L., 1172
Leiper, C. I., 1265, 1508*
Leis, E. R., 75, 205
Leo, P. R., 722
Leonard, Jos. F., 975
Le Roy, H. H., 118, 203
Leverich, C. E., 653
Levy, E. D., 74
Lewis, C. H., 764
Lewis, Dwight N., 73, 116*
Lewis, I. R., 250
Lewis, Russell G., 203
Lightfoot, W. I., 75
Likert, G. H., 1510
Lilley, F. C., 469
Lilley, F. C., 469
Lilley, F. L., 805
Lillie, H. J., 1172
Lincoln, Frederick B., 914
Lincoln, Frederick B., 915
Lincoln, Fred

Lyons, L. W., 1506

McArthur, J. O., 858

McAuley, J. D., 75

McAuliffe, Eugene, 752

McBean, W. H., 1217

McCabe, L. E., 761, 858

McCarthy, A. A., 1172

McCarthy, C. A., 1264

McCarthy, O. W., 722

McCarthy, O. W., 722

McCarty, R. E., 35*

McClannahan, E., 1024, 1510

McClintock, W. M., 975

McCornell, David H., 1504

McCormack, Stanley, 122

McCormick, C. C., 378

McCormack, Stanley, 122

McCormick, W. L., 858

McCormick, W. H., 858

McCuaig, D. J., 654

McCue, J. H., 204

McDaniel, C., 1172

McDenald, E. C., 972

McDonald, E. C., 972

McDonald, James, 807

McDonald, James, 807

McDonald, James, 1072, 1127

McFarland, H. F., 1220

McGeen, D. M., 75

McGoff, J. H., 761

McGraw, James H., 380

McGrew, J. A., 36, 1266

McGroarty, W. B., 419

McIlvaine, C. L., 1218

McKeen, Benjamin, 74*

McKellar, R. L., 164, 247‡

McKeeney, W. F., 975

McKillop, R., 377

McKinnon, J. H., 163

McKowen, A. A., 805

McLain, E. P., 1264

McLaughlin, H. L., 75

McLean, Arthur W., 471

McLean, James E., 163‡
McMaster, H. C., 74
McMaster, H. C., 74
McMilan, A. E., 292
McMinn, H. I., 1170
McNamara, T. J., 1504
McNaughton, James, 380
McNeill, C. M., 1264
McNulty, J. H., 249
McPartland, M. B., 1510
McPhail, W. F., 761
McPherson, Edgar S., 1023
McQuade, R. J., 722
McQuillein, J. E., 470
Mcfague, J. J., 722
McVulkin, H. P., 164
McQuillen, J. E., 470
Mcfague, J. J., 722
McVey, William D., 1127
McWade, F. J., 761
Mass, S. J., 36
MacElveny, A. W., 469, 760‡
MacLaren, M. M., 1026
MacLaren, M. F., 1217
MacLeod, J. R., 653
MacNeill, Charles, 294
Macon, E. A., 1127
MacLeod, J. R., 653
MacNeill, Charles, 294
Magaw, Charles, 294
Majschaider, A. F., 378
Malone, Richard F., 652‡, 1216
Malone, Richard F., 652‡, 1216
Malone, Carl M., 1174
Malott, F. Wn., 205
Manchester, A. E., 858
Manchester, P. E., 471
Mann, R. B., 1509
Mann, Ross, 1125
Mannn, R. B., 1509
Mann, Ross, 1125
Manson, E. C., 760, 857, 914‡
Mark, F. Lloyd, 380
Marker, Van N., 122
Markham, E. L., 1074
Markle, N. R., 1127, 1174
Markle, N. R., 1127, 1174
Markle, W. L., 1023
Marsh, A. Fletcher, 917, 1211
Marsh, Daniel L., 764
Marshall, Waldo H., 77
Martin, E. L., 973
Martin, F. E., 75
Martin, W. E., 857
Martyn, J. Turner, 337
Marvel, Frank W., 1120
Massey, R. V., 1205, 1509*
Mathews, R. T. G., 888
Matthews, R. T. G., 889
Millian, R. M., 1074
Mills, R. H., 1073
Millier, D., 1127
Millier, M. D.,

Moffett, George D., 761
Monroe, John T., 722
Monroe, J. B., 118
Moody, M. E., 805
Moon, D. C., 334, 419‡
Mooney, P., 419, 653
Moore, A. J., 1265
Moore, H. C., 760
Moore, H. J., 204, 291‡, 915
Moran, W. F., 292
Morden, Earle Bell, 1510
Morehead, William S., 1074
Morehouse, Charles H., 75, 120‡
Morehouse, R. H., 205
Morgan, B. E., 75
Morgan, Dwight C., Jr., 973
Morgan, E. C., 1024
Morristy, George A., 1126, 1219*
Morris, Harrison, 123
Morris, John, 294
Morris, Herrison, 123
Morris, Harrison, 124
Morris, Harrison, 125
Mossier, L., 207
Morrison, C. M., 334
Morrow, J. W., 245
Morse, C. A., 605*
Mosby, W., 1125
Mosier, L., 207
Moth, George, 722
Motsett, Charles H., 1127
Mount, J. W., 1218
Mount, R. P., 973
Moursund, E. M., 419
Muchall, H. H., 1218
Mudge, Burton, W., 763
Mueller, E. F., 1127
Mueller, Stephen E., 1220
Mulcahy, P. H., 469
Mulhern, J. W., 419, 470
Mulligan, M. A., 419
Munroe, K. O., 1508
Munster, A. W., 1510
Munyan, C. B., 246
Murphy, Grayson M. P., 380
Murphy, J. E., 377
Murphy, T. N., 205
Murray, Charles F., 975
Murray, H. T., 469
Murrian, W. S., 163
Myers, C. F., 74
Myler, Paul J., 380*
Nagel, John T., 1173‡
Nagle, C. E., 761
Nash, F. P., 1220
Neff, A. P., 722
Neff, William W., 1024

Myers, C. F., 74
Myler, Paul J., 380*

Nagel, John T., 1173‡
Nagle, C. E., 761
Nash, F. D., 1220
Nash, F. P., 1220
Neff, A. P., 722
Neff, William W., 1024
Neil, George E., 1120
Nelms, W. H. L., 761
Nelson, Charles A., 1257
Nelson, G. A., 472*
Nelson, R. M., 37
Netherland, W. M., 163
Newbern, J. W., 245
Newell, James W., 35
Newman, C. A., 1259
Newton, Albert W., 37*
Newton, Alert W., 37*
Newton, Peter A., 122
Nichols, G. C., 36, 121‡
Nicholson, Macy, 972, 1072‡
Norris, E. E., 163
Norton, C. F., 120
Nott, L. A., 1211
Nowell, F. M., 972
Noyes, W. H., 1126
Nutting, R. W., 1217
Oakley, C. B., 858
Oatley, Henry, B.

Oakley, C. B., 858
Oatley, Henry B., 860
O'Boyle, J. J., 469
O'Boyle, J. J., 469
O'Brien, J. E., 1217
O'Brien, J. W., 653
O'Brien, William E., 1074
O'Connell, William E., 1021
O'Connor, J. J., 860
Ogborn, William E., 335‡
Oliver, A. O., 1072
Oliver, H. W., 74
Olson, Edward E., 858
Orr, Jameš, 419
Orr, J. W., 74
Osborn, William Church, 913
Osborne, L. A., 1506
Osgood, Farley M., 764
Osgood, H. A., 1216
Otterson, F. J., 1072
Ouellet, D. O., 36
Overpeck, Leroy, 1266
Oviatt, H. C., 1126*
Owen, Galen B., 915, 1074*
Owen, W. F., 290
Pace, Robert T., 420

Owen, W. F., 290

Pace, Robert T., 420

Paine, Waldo G., 973

Palmer, I. E., 419, 470‡

Parker, F. A., 1217, 1220

Parks, Robert N., 1259, 1504

Parrish, J. B., 1217

Parsons, B. F., 1266

Parsons, T. W., 760

Paschall, W. E., 74

Patchin, Robert H., 917

Paten, Frank P., 1174

Patterson, W. J., 1506

Patton, Charles, 972
Payne, J. B., 973, 1024*
Peacock, E. E., 120
Pearce, W. G., 77
Pearson, E. J., 905*
Pearson, J. W., 1220
Pearson, O. E., 163
Pearson, R. L., 1219
Peckenpaugh, C. D., 1217
Peeples, Howell, 722
Pegram, R. B., 204
Pennington, Edmund, 1023
Pennington, H. R., 470
Penrose, Spencer, 1264
Perine, David M., 1172*
Perkins, H. J., 1265
Perrine, D. M., 1024
Peters, Ralph, Jr., 972
Peterson, A. C., 334
Peterson, A. C., 334
Peterson, A. C., 344
Peterson, Harry, 1024
Pettibone, F. G., 1128
Pew, John O., 122
Pfahler, F. P., 1074
Pflasterer, H. B., 1127
Phelps, M. L., 1264
Phillips, A. D., 805, 858
Phillips, C. J., 377
Phillips, M. D., 805, 858
Phillips, C. J., 377
Phillips, M. D., 805, 858
Platt, J. W., 291
Pickard, J. F., 74
Pierce, J. J., 419
Piper, W. R., 420
Pitt, Wm. J., 75
Plant, A. H., 203
Platt, J. G., 724*
Platten, John W., 290
Plummer, R. A., 470
Plummer, S. C., 1174
Podmore, J. M., 471
Poetter, E. H., 5654, 656
Pollock, George L., 37, 39*
Pomar, T. V., 722, 760‡
Poor, C. O., 1120‡
Poore, George A., 75, 2054, 1127
Pope, John L., 860
Porter, J. S., 337
Potter, E. C., 290, 1264
Powell, J. S., 972
Powers, M. J., 1266
Prall, W. M., 74, 163
Pratt, A. E., 915
Powers, M. J., 1266
Prall, W. M., 74, 163
Pratt, A. E., 915
Pritchett, A. L., 972
Pruett, J. J., 74, 652
Prytz, B. C., 1027
Pummill, P. W., 246
Purdy, F. A., 764
Pye, David W., 1504*

Ouattrone, F., 1120 Ouery, J. R., 972 Ouest, Harry C., 975, 1026* Ouickel, R. D., 164 Quilty, Joseph P., 35, 1023* Quinn, E. Y., Jr., 722, 1216, 1508*

Quilty, Joseph P., 35, 1023*
Quilty, Joseph P., 35, 1023*
Quinn, E. Y., Jr., 722, 1216, 1500
Radford, Robert, 1170*
Rafert, L. A., 1264
Rahn, N. H., 120
Ralston, J. S., 295
Ralston, J. S., 295
Ralston, L. T. M., 1174
Ramage, J. C., 292
Ramspacher, G. F., 1218
Randall, George C., 1074
Rankin, S. A., 975
Ransom, William L., 856
Rathburn, J. A., 163
Ratliff, C. M., 292
Rausch, C. C. P., 1218, 1266‡
Ray, Hal S., 1174
Reed, H. J., 335
Reese, Charles L., 725
Reese, Charles L., 725
Reese, Charles L., 725
Regan, Edward E., 1127
Reigel, Fred S., 291‡
Reinholdt, J. H., 420, 1173‡
Reinholdt, J. H., 420, 1173‡
Reinsagen, H. B., 471
Remmel, William S., 975
Replogle, J. Leonard, 123, 294
Resch, J. C., 419, 420
Reynolds, F. N., 1510
Reynolds, W. C., 1172
Rhodes, C. H., 1259
Rhodes, Lewis B., 764
Rhodes, H. J., 118
Rhuark, F. W., 292
Rice, George W., 1074
Rice, J. S., 1126, 1128
Rice, N. M., 74
Rice, S. L., 420
Rich, J. C., 290
Richards, G. J., 163
Richardson, G. F., 1172
Richardson, W. W., 761
Richerdson, W. W., 761
Richert, Wm., 725
Ricker, H. F., 290

ELECTIONS AND APPOINTMENTS—Continued

Rider, Whitney J., 1074
Ridgely, J. K., 1218, 1266;
Ridgway, A. A., 975
Riegel, F. S., 164
Rigdon, R. W., 760
Rightmeyer, J. H., 760, 805
Rine, Edwin M., 376;, 377
Ringer, F., 1174;
Ripley, P. M., 1264
Rist, C. J., 915
Ritchey, R. M., 653, 722
Robbins, Franklin G., 914
Robertson, A., 1125
Robinson, R. B., 915
Rodney, Keith R., 1120
Roederer, E. L., 335
Roesch, A., 205
Ronaldson, F., 76
Root, Logan H., 1074
Rosen-Baum, E. R., 764
Roth, H. J., 761, 858;
Roth, J. C., 291, 1265, 1508
Rouleau, J. L., 120
Rouse, H. E., 164
Rouzer, I. W., 1218,
Rowan, C. A., 123
Rowland, Sidney V., 1220
Ruby, E. L., 1075
Ruby, R. L., 1172
Ruffer, Augustus E., 914, 972;
Ruggles, H. E., 469
Ruhl, H. T., 1510
Ruiter, A. R., 722
Runnells, Clive, 1125*
Russ, J. F., 119
Russell, C. A., 164
Russell, J. L., 191
Russell, Morton, 1266
Ruth, S. F., 74
Ryan, John, 163, 203;
Ryan, W. B., 973
Ryan, W. B., 973
Ryan, W. B., 973
Ryan, W. B., 1510
Sadler, W. T., 291
Sargent, H. B., 118

Ryan, Wm. B., 1510

Sadler, W. T., 291
Sargent, H. B., 118
Sasser, E. C., 163
Savage, H. D., 122
Savage, J. K., 204
Sawtelle, Fred W., 1220
Sawyer, James D., 166, 209‡
Sayer, M., 1217
Saye, S. W., 762
Scandrett, Benjamin A., 163, 245‡, 290
Schaff, W. F., 1125
Schimpeler, C. H., 917
Schimpeler, C. H., 917
Schimpeler, C. H., 917
Schiaffee, William, 1219
Schlaffy, J. F., 337
Schleyer, George H., 1172
Schoenky, O. B., 722
Scholz, Carl, 1217, 1266*
Schonitzer, George E., 805, 914‡
Schoenky, O. B., 722
Scholz, Carl, 1217, 1266*
Schonitzer, George E., 805, 914\$
Schoenker, S. L., 166
Schram, I. H., 1025
Scheiber, Edward A., 764
Schroyer, H. H., 860
Schultz, Edward, 1220
Schultz, M. L., 761
Schwinn, F. S., 419
Scofield, E. W., 120
Scott, B. M., 806
Scott, Howard, 972, 1126*
Scott, Robert T., 1026
Scott, Robert Bruce, 972, 1023*
Scott, Robert Bruce, 972, 1023*
Scott, R. L., 1217
Scott, W. W., 1219
Scully, F. J., 1125
Sealy, W. G., 654
Scott, Robert Bruce, 972, 1023*
Schwinn, F. J., 1125
Sealy, W. G., 654
Scott, Robert Bruce, 972, 1023*
Scott, Robert Bruce, 972, 1023*
Scott, R. L., 1217
Scott, W. W., 1219
Scully, F. J., 1125
Sealy, W. G., 654
Scott, Robert Bruce, 972, 1023*
Schorn, Robt, J., 1218
Seigle, R. A., 469
Seil, P. W., 1504
Selfridge, Harry, 119
Sevier, L., 204
Sewing, A. J., 974
Sexton, J. R., 1025
Seymour, Edward I., 1266‡
Shanks, H., 1045
Shanp, C. L., 858
Sharp, H. W., 204
Shaw, E. H., 164, 292‡
Shea, T. A., 36
Shea, T. J., 246
Sheaffer, D. M., 1205
Sheaffer, D. M., 1206
Sheaffer, D. M., 1206
Sheaffer, D. M., 1207
Sheaf, F. J., 1125, 1216*

Shepard, H. H., 377
Shepherd, P. L., 246
Sheridan, H. W., 1217
Shields, John D., 35
Shields, S. S., 656
Shipley, Walter, 164
Shipman, E. H., 419, 420, 471‡
Shively, J. C., 761
Shoemaker, H., 164
Shriver, C. M., 1265
Shropshire, Ralph, 164
Shropshire, W. A., 858
Shumate, Golder, 377, 470*
Shute, H. D., 764, 1506*
Siegrist, H. W., 1023
Siemon, T. W., 123
Sikes, Clarence S., 857
Simpson, R. L., 1024
Sims, C. S., 35, 1072, 1172
Sisley, Lyman A., 424
Sisson, Francis H., 1510‡
Skelton, F. A., 39
Skillen, J. H., 205
Skillman, T. J., 806
Slater, Percy, 119, 163
Slawson, James H., 1211, 1259*
Slaybaugh, Harvey B., 763*
Sloan, W. C., 245
Small, James H., Jr., 860
Smart, V. I., 1120
Smith, A. J., 653, 722‡
Smith, F. M., 203, 1125
Smith, F. M., 203, 1125
Smith, F. M., 203, 1125
Smith, F. M., 1265
Smith, J. Allen, 764
Smith, H. H., 204
Smith, H. H., 204
Smith, J. W., Jr., 805, 857*
Smith, J. Nelen, 764
Smith, J. W., Jr., 805
Smith, J. Allen, 764
Smith, J. Warshall B., 1264
Smith, Loury, 974
Smith, M. M., 245
Smith, J. Warshall B., 1264
Smith, J. Warshall B., 1264
Smith, W. R., 377
Smith, W. R., 375
Smith, W. R., 375
Smith, W. R., 315
Smith, F. M., 335
Smith, F. M., 203
Spencer, J. C., 120
Smith, W. R., 375
Smith, J. Allen, 764
Solomon, M. T., 760
Somerville, J. A., 163, 1217
Sommerville, D. L., 972
Spencer, H. B., 203
Spencer, J. C., 120
Steadwell, J. N., 246, 3351
Stebbins, S. C., 39, 78*
Steede, J. R., 378
Steede, J. R., 378
Steedel, J. R., 378
Steedel, J. R., 378
Steedel, J. R., 378
Steedel, J. R., 379
Stevens, M. S., 107
Stevens, M. S.

Tackaberry, F. H., 1211
Tansley, William, 805, 913‡
Tate, R. H., 164
Taussig, J. E., 974
Tavis, J. J., 806
Tayloc, W. H., 164
Taylor, F. W., 36‡
Taylor, L. S., 290, 334‡
Taylor, L. S., 290, 334‡
Taylor, R. T., 1264, 1265
Teague, J. E., 74
Templeton, J. N., 335
Tenwick, Richard, 77
Terrill, Roy, 418‡
Terry, Charles A., 1506
Terry, John L., 724
Thacker, C. W., 1266
Thayer, Ralph M., 246
Thiele, Charles F., 1510
Thom, Alfred P., 1072
Thomas, D. C., 249
Thompson, A. R., 915
Thompson, A. R., 915
Thompson, William T., 472
Thompson, William W., 77
Thomson, E. F., 858
Thompson, William W., 77
Thomson, E. F., 858
Thompson, William W., 77
Thompson, William W., 77
Thompson, William W., 77
Thompson, C. I072
Thurber, N. P., 334, 419‡, 1217
Timberlake, W. H., 291, 1024
Tocher, J. P., 291
Todd, B. H., 470
Toft, Guy, 205
Tolley, Samuel, 471
Tombs, Guy, 378*
Tomlinson, E. G., 119
Toole, O. A., 1024
Topping, A. R., 1120
Topping, A. R., 1120
Topping, P., 1220
Tordello, J., 722
Torrey, Arthur M., 1259
Tousey, W. C., 75
Townsend, F. B., 1023, 1072‡
Townsend, F. B., 1023, 1072‡
Townsend, F. B., 1023, 1072‡
Townsend, F. B., 1217
Tozzer, George, 1220
Trachta, G. P., 858
Trappell, W., 722
Trapp, Charles H., 1211
Treleaven, W. T., 291, 420
Treuting, J. N., Jr., 1216
Trevor, John M., 249
Tripp, Guy E., 1506
Trowbridge, Granville S., 1073‡
Truslow, Howard, 806
Tucker, G. F., 972, 1072‡
Turner, Daniel L., 803
Turner, W. A., 1024
Tutviller, E. M., Jr., 118
Tyler, W. E., 334
Tyler, W. T., 245, 1172, 1216*
Tyson, I. T., 246, 469‡

Umshler, A. M., 760 Upson, S. C., 471 Uptegraff, W. D., 123 Upthegrove, Daniel, 118* Urbut, C. F., 761

Vance, W. H., 858, 1024
Vanderlip, Frank A., 1027
Van Deventer, John H., 422, 860
Van Horn, C. W., 75, 204*
Van Horn, R. W., 209
Van Houten, Richard A., 1026
Van Slyck, R. S., 1127
Van Slyke, H. E., 653
Van Sweringen, F. H., 1075
Van Vilet, B. F., 1217
Varney, Harlow A., 380, 472*
Vauclain, S. M., 1120
Vaughan, David L., 860
Vawter, James, 1174
Voight, A. E., 1173
Voilmer, W. G., 1216, 1508‡
Von Blucher, L. F., 1266
Von Sprecken, F., 120
Vought, Charles S., 1026

Wagner, V. B., 1264
Wahoske, H. R., 75
Wailes, S. I., 975
Waldron, A. B., 164
Waldron, H. A., 724
Walker, H. S., 334
Walker, R. C., 760
Walker, William, 722
Walker, W. K., 205
Wall, W. O., 760
Wallace, J. S., 915
Wallace, M. A., 290
Wallenberg, Marcus, 1027
Walliser, George, 913

Walsh, J. M., 1174
Walter, J. W., 205
Walters, J. J., 248
Ware, W. C., 164
Waring, L. G., 294
Warnecke, John G., 1074
Warren, W. D., 1126, 1219
Wassell, F. L., 1505*
Wassum, W. J., 163
Watkins, F. W., 1125
Wassum, E. L., 205
Watson, James D., 1125±
Watson, P. J., Jr., 1220
Weaver, H. A., 245
Webb, A. H., 1509
Webb, G. H., 1174
Weber, E. J., 1508
Webster, H. E., 420
Weed, Joseph, 75
Wegner, A. C., 1218
Weidner, O. A., 246
Weigman, Ernest H., 472
Weir, J. M., 420, 654±
Weiss, Howard F., 808
Wells, Emery, 1220
Wells, I. R., 1644
Wells, W., 1024
Welsh, M. A., 805
Weller, J. N., 249
Werne, J. A., 1024, 1218
Westoott, G. H., 653, 805, 1127*
Westinghouse, H. H., 380
Weymouth, Frank M., 724*
Whaley, A. R., 1023
Wharton, Joseph, 123
Wheeler, F. S., 1025
Whelen, E. R., 1218
White, C. E., 422
White, Edward J., 1125, 1172*
White, H. T., 118, 1216
White, J. Lowell, 1265
White, P. G., 470
White, R. B., 1509
White, R. G., 36, 75, 120‡
Whitney, H. Arry Payne, 294
Whitney, H. T., 1219
Whitney, H. T

Wright, Thos. H., 35 Wyllie, G. B., 470 Yager, Louis, 205, 973 Yantis, F. S., 653 Yardley, C. F., 1126, 1219

Yardley, Farnham, 336 Yarke, E. H., 858 Yeaton, H. T., 1127 Yeomans, George G., 1126 Youman, J. D., 118

Young, Alexander, 1220 Young, C. D., 1025, 1174* Young, G. W., 74 Young, N. H., 1217 Young, R. W., 39*

Younger, T. W., 722 Zane, W. F., 205 Zimmerman, L. C., 1127 Zinsmaster, A. F., 975

OBITUARY

[* Indicates photograph and sketch. ‡ Indicates sketch only.]

Alden, John F., 422 Anderson, John A., 762\$

Bell, James R., 248
Bennett, Frederick S., 166
Berdan, William, 166
Berry, Thomas, 1259‡
Bissell, William A., 206‡
Block, W. T., 654‡
Brady, James B., 860*, 1027, 1120
Bridgman, John C., 1259‡
Brinkerhoff, A. B., 164
Britton, F. H., 370
Brown, Arthur, 762‡
Buchanan, Archibald, Jr., 292‡
Bucklen, Herbert E., Sr., 121
Burke, James, 858‡

Cahill, William R., 378 Card, C. W., 121‡ Clements, Judson C., 1313, 1501* Clifford, J. M., 248, 334 Coughlin, Jack, 1259 Creighton, George W., 1220‡, 1265 Crittenden, Oliver H., 206, 248*, 420

Daab, Frederick C., 378* Dawes, Chester M., 859* Dean, Joel, 335 Derickson, Thomas M., 1504‡ De Rousee, O. J., 37

Dix, John W., 975 Dooley, M. H., 335 Dodd, William C., 473*, 724 Duncan, C. R., 762

Fisk, George C., 808

Gentry, Thomas Wyatt, 77 Griest, A. P., 206, 245 Grieves, Edward W., 336‡

Hall, Charles Sumner, 1510
Hannum, Ellis J., 122
Harlan, R. J., 76
Harrison, James P., 654
Heath, John, 1074
Hickey, John, 655‡
Hill, George Henry, 250*
Hooker, Harry C., 76
Howe, John K., 725
Hoyt, J. H., 654
Hughes, Benjamin, J., 1220, 1265
Hughes, Colonel Herbert, 166
Hutchinson, Edward B., 1174
Hutchison, S. A., 37

Jenkins, A. B., 39, 336 Johnson, James M., 1259 Johnson, W. O., 1266

Kalman, Arnold, 1174 Katte, Walter, 421‡

Keegan, J. F., 471 Kelly, R. C., 335 Kendig, Roscoe B., 1074* King, Arthur, 249, 422

Lewis, E. C., 292, 421*, 857 Long, Simon C., 723*

McAlpine, Alexander R., 123 McBride, Walter J., 166* McDoel, Joseph F., 1025 McDonald, D. J., 974 Manchester, Albert E., 1025* Marquardt, Charles W., 378, 653 Minton, W. D., 292 Modisette, J. B., 378‡, 761 Murray, Oscar G., 471, 655*

Nafis, A. T., 723

Patterson, Samuel S., 915 Pheney, M. A., 1174 Pomeroy, L. R., 1027*

Ramsey, C. C., 123* Ransome, Ernest L., 422 Reed, Frederick E., 380\$ Robinson, Alexander P., 380 Robinson, John G., 421 Rockwell, Fayette R., 859*, 972

Sargent, George H., 860
Schoen, Charles T., 250‡
Schoen, Karles T., 250‡
Schoenmaker, Henry, 808
Seymour, Manly T., 1074
Sharp, H. W., 421
Sheldon, William H., 1074
Siems, Peter, 422
Stebbins, Albert C., 472‡
Strattan, George Woolley, 915

Thomas, Richard L., 166 Thomson, Captain Willard, 858‡ Thorne, Lansing S., 421‡ Thornburgh, William, 206* Turner, Charles T., 121

Underwood, W. J., 37, 334

Van Mater, William A., 471

Waldron, Holman D., 807, 973 Willard, F. B., 1266 Walz, W. C., 723 Waterhouse, R. F., 1174 Weir, Henderson, 472, 764 Willcut, Joseph L., 378 Wood, Elmer H., 762‡ Wood, James R., 1025*, 1250

Yarnall, H. E., 723‡ Young, Erastus, 807‡

INTERSTATE COMMERCE COMMISSION RULINGS

[* See Also General Index.]

Akron, Canton & Youngstown v. Baltimore & Ohio, 1070

Ohio, 1070

Baltimore Chamber of Commerce v. Baltimore & Ohio et al., 201.

Board of Commerce, Lexingon, Ky., v. Cincinnati, New Orleans & Texas Pacific, 1117

Board of Trade of the City of Chicago v. Pere Marquette et al., 1117

Chamber of Commerce of La Crosse, Wis. v. Great Lakes Transit Corporation et al., 1167

Consumers' Company v. Minnescolie St. Park

Consumers' Company v. Minneapolis, St. Paul & Sault Ste. Marie et al., 968
Cultra, J. L., and Myrtle Cultra, partners, trading as the Clay County Produce Company, v. Western Union Telegraph Company, 1209
Du Pont, E. I., De Nemours Powder Company v. Philadelphia & Reading et al, 33
Florida Growers' & Shippers League v. Alabama & Vicksburg et al., 969
Ford Collieries Company et al. v. Bessemer & Lake Erie, et al., 72
Green, R. H., et al. v. Alabama & Vicksburg, 968

Inland Navigation Company, Inc., v. Wabash et al., 969

In re furnishing cars at carrier's convenience, 71

In re proportional rates from points in Illinois, Indiana, Iowa, Michigan, Missouri and Wisconsin to Ohio river crossings, 968

Wisconsin to Omo river crossings, 906

In re Southern Pacific's ownership of Atlantic Steamship Lines, 416

La Crosse Shippers' Association, for Cargill Coal Company et al. v. Chicago, Milwaukee & St. Paul et al., 969

Lehigh Portland Cement Company v. Baltimore & Ohio Southwestern, et al., 159

& Ohio Southwestern, et al., 159
Memphis Merchants Exchange et al. v. Illinois
Central et al., 855
Michigan Paper Mills Traffic Association et
al. v. Alabama & Vicksburg et al., 288
National Implement & Vehicle Association of
the United States et al. v. Baltimore &
Ohio et al., 72
National Poultry, Butter and Egg Association
v. Baltimore & Ohio Southwestern et
al. 803

v. Baltimore & Ohio Southwal, 803 New Orleans Joint Traffic Bureau, 33

New York Hay Exchange Company v. New York Central, 803
Northern Potato Traffic Association v. Chicago & Alton et al., 1117
Paducah Board of Trade et al. v. Illinois Central et al., 969
Pierce Oil Corporation v. Missouri, Kansas & Texas et al, 968
Railroad Commissioners of the State of Florida v. Florida East Coast, 243
Richmond Chamber of Commerce v. Seaboard Air Line et al, 1117
Scully, D. B., Syrup Company et al, v. Alabama Great Southern et al, 968
Silk Association of America v. Pennsylvania Railroad et al., 1209
Southern Rice Growers' Association et al. v. Texas & New Orleans et al., 467
Traffic Bureau of Nashville v. Louisville & Nashville, 803
Traffic Eureau of the Toledo Commerce Club et al. v. Cincinnati Hamilton & Dayton et al., 1021
Utah-Idabe Millers & Grain Dealers' Association v. Denver & Rio Grande et al., 243
Wichita Wholesale Furniture Company v. Atchison, Topeko & Santa Fe et al., 1117

RAILWAY CONSTRUCTION

Alabama Great Southern, 725
Alabama Roads (Electric), 167
Amargossa Valley, 1212
Americus & Atlantic, 473
Americus, Hawkinsville & Eastern, 473
Appalachian Railway, 167
Arkansas Harbor Terminal, 251
Ashland-Greenup Railway (Electric), 861
Atchison, Topeka & Santa Fe, 40, 1212, 1260, 1507
Atlanta & Anderson (Electric), 295 Atlanta & Anderson (Electric), 295 Atlanta & West Point, 473, 725 Atlanta, Birmingham & Atlantic, 1171 Atlantic & Northwestern, 725

Atlantic & Northwestern, 725

Baltimore & Ohio, 167, 337, 1212

Baltimore (Md.) Roads, 295

Bartlett-Western, 725

Barton County & Santa Fe, 425, 1212

Belle Fourche & Northwestern, 251

Bibb Belt Railway, 657

Birmingham Southern, 725

Black Mountain & Clinchport, 167

Boise, Twin Falls & Nevada, 473

Boston & Maine, 382

Bryan & Central Texas, 251, 725

Buffalo, Rochester & Pittsburgh, 79, 918

Burlington, South Chicago Terminal Railroad, 295, 337

Canadian Northern Quebec, 251
Canadian Pacific, 976
Charleston-Gauley (Electric), 976
Charlotte, Monroe & Columbia, 79
Chicago & Alton, 124
Chicago & North Western, 918, 1260, 1507
Chicago, Burlington & Quiney, 337, 765, 808, 1260
Chicago, Fox Lake & Northern (Electric), 1260
Chicago, Fox Lake & Northern (Electric), 1260
Chicago, Milwaukee & St. Paul, 209, 425, 1260
Chicago, Springfield & Cairo, 1121
Chicago Union Station Company, 1028
Christie & Eastern, 295, 337
City of Prineville, 861
Clear Lake Railroad, 1212
Cleveland, Cincinnati, Chicago & St. Louis, 1028
Clinton & Oklahoma, 337
Colorado, Kansas & Oklahoma, 295
Cumberland Valley, 976
Delaware Roads, 1171

Delaware Roads, 1171 Dickinson & Northwestern, 918, 976 Du Quoin, Christopher & Eastern (Electric) 918

Eagle Pass & Gulf, 124 Elk Fork, 1028 El Paso & Southwestern, 1076 Enid & Northwestern, 425

Eric Railroad, 918 Essex Terminal Railway, 861 Ettrick & Northern, 1507 Evansville & Indianapolis, 725 Export Railway, 765

Florida Roads, 337, 918 Florida Roads (Electric), 167, 209 Franklin County Traction, 473

Garyville Northern, 1171
Georgia Roads, 209, 765
Government Road, 1260
Great Northern, 295, 473, 1028, 1260
Green Bay & Eastern, 808
Gulf, Mobile & Northern, 425, 473
Gulf Ports Terminal Railroad, 40
Gulf, Sabine & Red River, 1171

Hampton & Langley Field (Electric), 295
Harney Valley Railroad, 251
Henderson & Wilson, 473
Hillsborough-Pinellis Interurban, 167
Houston, Richmond & Western, 167
Howard Terminal, 1171
Hudson & Manhattan (Electric), 657

Illinois Central, 209, 918, 976, 1076, 1121, 1260 Illinois Terminal Railroad, 1260

RAILWAY CONSTRUCTION—Continued

International Railway (Electric), 295 Interprovincial & James Bay, 79 Jefferson & North Western, 725

Kansas & Oklahoma Southern, 251 Kansas City, Mexico & Orient, 1076 Kentucky Roads, 124 Kentucky South Eastern, 337 Kewanee & Eastern, 209 Kirby Planing Mill Company, 295 Knoxville Internrban, 425 Knoxville, Sevierville & Eastern, 295 Kosciusko & Southwestern, 765

Lake Shore Railroad, 765 Lehigh & New England, 657, 976 Los Angeles & Salt Lake, 295, 1212 Louisiana & Pine Bluff, 765 Louisville & Nashville, 79

Louisville & Nashville, 79

Manganese Steel Rail Co., 77

Manning, Mandan & Freda, 808

Maryland-Pennsylvania Roads (Electric), 209

Meridian & Bigbee River, 425

Metropolis Belt & Terminal Company, 425

Mexican Roads, 1121

Miami Mineral Belt, 1507

Midland & North Western, 337

Miltenberg & Southeastern, 79, 251

Milwaukee Western (Electric), 657

Minneapolis, St. Paul & Sault Ste. Marie, 1260

Mississippi & Western, 338, 861

Mississippi Roads, 296

Missouri Pacific, 382

Mobile, Volanta & Pensacola, 124

Monongahela Valley Traction, 209

Nashville, Chattanogra & St. Louis, 124

Nashville, Chattanooga & St. Louis, 124
National Railways of Mexico, 40
Nevada Railroads, 1076
New Orleans & Lower Coast, 79
New Orleans, Ft. Jackson & Grand Isle, 79
New York Central, 209, 382, 1028, 1076, 1121
New York, Chicago & St. Louis, 1260

North Bend Mill & Lumber Company's Road, 657 North Carolina Roads, 338, 861 North Georgia Mineral, 861 North Texas & Santa Fe, 40 Northern Pacific, 473, 808

Ocean City & Fenwick Island (Electric), 976
Oklahoma Union (Electric), 657
Oregon Electric, 918
Oregon-Washington Railroad & Navigation Co., 79, 1028
Orleans-Kenner Electric, 808
Osage County & Santa Fe, 40, 338, 425
Ozark & Arkansas Midland, 251
Ozark Valley, 251

Panhandle & Western, 808
Peavy-Wilson (Lumber Line), 167
Pennsylvania Lines West, 473, 765, 918
Pennsylvania Railroad, 296, 765, 1171, 1507
Philadelphia & Reading, 976
Pigeon River Railroad, 296
Pine Bluff & Northern, 251
Port Angeles & Grays Harbor, 296
Prescott & Phoenix Short Line, 1212, 1507
Prineville & Northern, 167

Red River & Gulf, 765 Ringling & Oil Fields, 657 Roby & Northern, 79 Rome & Northern, 251 Roscoe, Snyder & Pacific, 657

St. Louis-San Francisco, 1507
Salt Lake & Utah, 1028
San Antonio & Aransas Pass, 658
San Antonio, Uvalde & Gulf, 1171
San Diego & Arizona, 474
Sand Springs, 658, 1507
Savannah River Terminal, 209
Seaboard Air Line, 1171
Shaw & Southwestern, 725

Ship Channel Transportation Company (Electric), 808
South Carolina Road (Electric), 338
South Dakota Short Line, 918
South Florida Interurban, 1028
South Plains & Santa Fe, 40
Southeastern Railway of Huntsville, 40
Southern New England, 252
Southern Pacific, 1507
Southern Railway, 382, 725, 765, 808, 861, 976, 1076, 1121
Southwest Missouri, 252, 1212
Spokane, Portland & Seattle, 725
Springfield & Carbondale, 765
Stanley Railway, 252

Tampa Southern, 296, 976
Tampico & Panuco Valley, 765
Temiskaming & Northern Ontario, 808
Texas Airline Interurban, 766
Texas Electric & Power Company, 1212
Texas Roads, 725, 1028
Texas Roads (Electric), 976, 1121
Texas State Railroad, 425
Trans-Mississippi Terminal, 167
Tucson, Phoenix & Tidewater, 1171

Union Pacific, 124, 658, 1076 Utah Roads, 766,

Virginia Iron, Coal & Coke Company, 296 Virginian Railway, 1121

Watauga & Yadkin River, 338
Wayne-Hardin, 425
Western Maryland, 209
Western Pacific, 1076, 1507
Westfield River (Electric), 79
West Virginia Roads, 209
Wheeling Coal Railroad, 296
Wilkes-Barre & Hazelton (Electric), 79
Winchester & Western, 209, 252

Yazoo & Mississippi Valley, 1171

FINANCIAL NEWS

Alabama & Mississippi, 426 Alabama Great Southern, 474 Arkansas Harbor Terminal, 252 Augusta Southern, 766

Baltimore & Ohio, 1260, 1507 Baltimore & Ohio Southwestern, 1212 Boston & Maine, 80, 168, 210, 338, 382, 658, 766, 862, 918, 1121

Boston & Maine, 80, 168, 210, 338, 382, 056, 766, 862, 918, 1121

Canadian Pacific, 766, 862, 976
Cape May, Delaware Bay & Sewell's Point, 1260
Carthage & Copenhagen, 1507
Catskill Mountain, 1028
Chesapeake & Ohio, 1121
Chicago & Eastern Illinois, 1121, 1507
Chicago & North Western, 80, 124, 726
Chicago, Milwaukee & St. Paul, 210, 862
Chicago, Milwaukee & St. Paul, 210, 862
Chicago, Rock Island & Pacific, 80, 168, 210, 252, 426, 474, 726, 862, 918, 1076, 1260, 1507
Cincinnati, Findlay & Fort Wayne, 726
Cincinnati, Hamilton & Dayton, 918, 1260
Cleveland, Cincinnati, Chicago & St. Louis, 80, 1171
Cal & Coke Railway, 338
Colorado & Midland, 474, 862, 918
Connecticut River, 918
Delaware & Hudson, 862, 976, 1028, 1260, 1507
Delaware, Lackawanna & Western, 210, 1171
Denver & Rio Grande, 124, 426, 1121, 1507
Detroit, Toledo & Ironton, 1171
Erie, 168, 252, 426, 474, 809, 862
Evansville & Indianapolis, 426

Georgia & Florida, 764 Gulf, Florida & Alabama, 1076 Gulf, Mobile & Northern, 168

Hocking Valley, 1212

Illinois Central, 1076 Indian Creek Valley, 1171 Interborough Rapid Transit, 117! International & Great Northern, 1171

Kansas City, Mexico & Orient, 862 Kansas City Northwestern, 426, 1212 Keokuk & Des Moines, 918

Lehigh Valley, 726, 1260 Long Island, 210, 658, 726

Marshall & East Texas, 210, 1028 Mississippi Valley, 976 Missouri & North Arkansas, 296 Missouri, Kansas & Texas, 40, 296, 338, 474, 1028, 1212 Missouri Pacific, 80, 252, 382, 474, 1076, 1212 Morris & Essex, 1171

Nashville, Chattanooga & St. Louis, 124, 338
Nevada Short Line, 1028
New Orleans & Northeastern, 40, 296, 426
New Orleans, Mobile & Chicago, 168
New Orleans, Texas & Mexico, 426
New York Central, 382, 426, 638, 809, 976, 1212
New York, Chicago & St. Louis, 726
New York, New Haven & Hartford, 252, 426, 726, 809, 976, 1028, 1121
Norfolk & Western, 168
Norfolk Southern, 976, 1028

Pascagoula Northern, 426
Pennsylvania-Detroit, 426
Pennsylvania Railroad, 124, 210, 426, 474, 764, 1260, 1507
Pere Marquette, 726, 766, 809
Philadelphia & Reading, 1260
Pittsburgh, Cincinnati, Chicago & St. Louis, 40, 809, 1507
Pittsburgh, Fort Wayne & Chicago, 1076
Pittsburgh, Shawmut & Northern, 1212

Quanah, Acme & Pacific, 124 Rutland Railroad, 474

St. Louis & Hannibal, 1212 Southern Pacific, 80, 296 Southern Railway, 40, 80, 296, 338, 382

Tennessee Central, 40, 338, 658, 809, 1028 Terminal Railroad Association of St. Louis, 1507 Texas & Pacific, 726, 918 Tidewater & Western, 1076 Tidewater Southern, 338

Union Pacific, 252, 1121

Valdosta, Moultrie & Western, 124, 168 Virginian Railway, 210

Wabash, 40
Wabash, Pittsburgh Terminal, 168, 766
Western & Atlantic, 338
Western Maryland, 210, 296, 976, 1212
Western Pacific, 338
Wheeling & Lake Erie, 80, 976
Wichita Falls & Northwestern, 1212

FOREIGN RAILWAY NOTES

Africa, 140, 716 Asia Minor, 14 Australia, 40, 60, 66, 140, 364, 741, 1400 Austria, 191, 658, 1419

Bolivia, 474 Brazil, 296

Chile, 296, 809, 935 China, 80, 196, 344, 410, 644, 765, 847, 862, 1097, 1119 Chosen, 168 Colombia, 1040 Costa Rica, 896, 916

Denmark, 1003, 1240

Ecuador, 628, 1094

England, 6, 40, 48, 60, 80, 109, 124, 144, 148, 180, 192, 221, 249, 314, 320, 348, 400, 426, 616, 658, 697, 763, 766, 838, 904, 906, 916, 944, 988, 1017, 1076, 1088, 1158, 1170, 1171, 1191, 1212, 1444

Finland, 272, 338 France, 192, 261, 293, 296, 658, 862, 1044, 1144 German East Africa, 776 Germany, 28, 55, 66, 165, 307, 714, 793, 1004, 1017, 1062, 1230, 1232, 1482

India, 147, 293, 721, 773 Ireland, 80, 106, 144, 1180 Italy, 750, 1247, 1475

Japan, 124, 382, 808

Madagascar, 253 Malay States, 1191 Manchuria, 645, 976, 1062 New Zealand, 474, 844 Norway, 703

Panama, 1106, 1111
Peru, 744, 1192
Prussia, 766, 1009
Russia, 28, 168, 252, 253, 422, 744, 791, 918, 932, 960, 10.2, 1111, 1119, 1121, 1503

Siam, 363, 1156 South Africa, 184 Spain, 86, 382, 390, 1044 Sweden, 38, 63, 272, 338, 998 Switzerland, 23, 134, 226, 976, 1058, 1246

